COMMONWEALTH of VIRGINIA

DEPARTMENT OF EDUCATION
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April 12, 2005

The Honorable Mark R. Warner
Governor of Virginia
State Capitol Building, Third Floor
Richmond, Virginia 23219

Dear Governor Warner:

The Virginia Department of Education has accepted the enclosed report, *The Virginia Class of 2004: Graduation Rates, Trends, and Remedial Initiatives*. The report was prepared by Commonwealth Educational Policy Institute (CEPI) in association with the Metropolitan Educational Research Consortium.

The department contracted with CEPI in August 2004 to study the graduating class of 2004. As you know, 2004 was a watershed year for Virginia's Standards of Learning (SOL) reform. It was the first year in which students were required to demonstrate proficiency in reading and writing to earn an Advanced Studies Diploma, a Standard Diploma, or a Modified Standard Diploma. The purpose of the study was to document how students met the new diploma requirements, how students and school divisions took advantage of the flexibility provided by the Board of Education for the awarding and earning of verified units of credit, how students who did not graduate on time fell short, and how interventions such as Project Graduation helped students meet higher standards.

While the data presented in the report concerning the Modified Standard Diploma is accurate, the context required for an understanding of this relatively new credential is not provided. The Modified Standard Diploma was created by the Board of Education in 2000 as a rigorous alternative for students with disabilities who might not meet the requirements for a Standard Diploma. The Board created this diploma in response to requests from stakeholders, including parents of students with disabilities who wanted disabled children included in the commonwealth's accountability program. The verification and content requirements for a Modified Standard Diploma are more rigorous than those for the pre-SOL reform Standard Diploma. A student with a disability must demonstrate achievement in English and mathematics on grade-8 SOL tests rather than the old Literacy Passport Test (LPT), which was a sixth-grade test.

There were 324 more grade-12 students with disabilities in 2003-2004 than during the previous year. Approximately 1,500 more students with disabilities completed high school during 2003-04 than during 2002-03. The number of black students with disabilities who completed high school increased from 2,252 in 2002-03 to 2,825 in 2003-04. The number of Hispanic students with disabilities who completed high school also increased, from 315 in 2002-03 to 378 in 2003-04. These data suggest that the Modified Standard Diploma provided an incentive for students with disabilities to complete their high school education.

At any time, a student seeking a Modified Standard Diploma can change his or her mind and seek a Standard or Advanced Studies Diploma. These students also may not be excluded from courses and tests needed to earn one of these diplomas. It also should be noted that state law requires school divisions to provide educational services to students with disabilities until the age of 21, enabling a student with a Modified Standard Diploma to continue to pursue a Standard Diploma.

The increase in the number of students earning a Modified Standard Diploma noted in the report was expected, given that 2004 was the first year in which students were required to pass SOL or equivalent tests in reading and writing to earn a Standard Diploma. The department, however, is concerned about the appropriate identification of students with disabilities and is providing school divisions with training and guidance on this issue.

The CEPI report estimates that 10 percent of the students in the class of 2004 dropped out at some point after their freshman year, compared with 11.2 percent for the class of 2003, 13 percent for the class of 2002, and 14.2 percent for the class of 2001. While the report was not intended as an in-depth study of the dropout rate, the data provided on grade-9 retention patterns in Table 9 on page 49 underscore the importance of considering retention when comparing the number of students in a graduating class with ninth-grade enrollment four years earlier. As the table suggests, a more accurate understanding of the dropout issue is gained by comparing the number of high school seniors with *grade-8* enrollment five years earlier. This historic pattern of grade-9 retention also underscores the importance of your advocacy for strengthening secondary education, especially career and technical programs, and the department's ongoing efforts to prepare minority and disadvantaged students for success in high school.

As the department reported to you last fall, 2,893 members of the class of 2004 participated in at least one Project Graduation activity. Of these students, 2,178 or 75.3 percent, passed required SOL tests and earned diplomas. The data on Project Graduation presented in the report is based on data provided by the department and information collected by CEPI through a survey of the commonwealth's school divisions. After examining the report, the department has concluded that the survey results overstate the number of students in the graduating class of 2004 who participated in Project Graduation because of the inclusion of students who participated as juniors, the multiple counting of students who were enrolled in more than one Project Graduation activity, and the inclusion of students who took part in locally devised remedial programs.

More than 94 percent of last year's seniors earned diplomas, defying predictions that requiring students to demonstrate proficiency in reading, writing, and other subjects would leave tens of thousands of students to face the future without a high school diploma. This achievement, documented in the enclosed report, reflects the hard work of educators and students and the commitment of your administration and the General Assembly to maintaining accountability while providing the support necessary for students to meet high standards.

Sincerely,

Jo Lynne DeMary

Jo Lynne DeMary
Superintendent of Public Instruction

JLD/jt

Enclosure

Final Report

The Virginia Class of 2004: Graduation Rates, Trends, and Remedial Initiatives

Prepared by the

Commonwealth Educational Policy Institute
In Association with the Metropolitan Educational Research Consortium

School of Education
Virginia Commonwealth University

April 8, 2005

Contents

Executive Summary

In August 2004 the Virginia Department of Education contracted with the Commonwealth Educational Policy Institute (CEPI) to conduct an investigation of high school graduation and completion in Virginia. The overall purpose of the study was to profile the high school class of 2004. To meet this goal the study focused data collection and analysis in four areas, which provide an organization for presenting the results:

- Profile of the class of 2004 graduates and completers
- Profile of the class of 2004 non-graduates
- Graduation and completion trends from 2001-2004, broken out by type of diploma, race/ethnicity, gender, division size, and region of the state
- Remedial initiatives to ensure student graduation

An important consideration in analyzing graduation data is to select a meaningful method of calculating graduation rates. For this study the "on-time diploma graduation" rate is used to define students who received an advanced, standard, modified standard, or special diploma in four years. This graduation rate was determined by calculating the ratio of diploma graduates to ninth grade enrollment four years earlier. (Note: this procedure is not the same as determining dropout rate.) This method of calculating graduation rates is similar to but not the same as what is used for Adequate Yearly Progress.

The study used secondary data analyses and survey methodology. Trend data were provided by the Virginia Department of Education for secondary analysis. A self-report survey was designed and completed by 95 percent of the state's school divisions to provide more detailed information on the class of 2004 and remedial initiatives. Divisions not responding were Galax City, Montgomery County, Petersburg City, Poquoson City, Pulaski County, and Rockbridge County.

A profile of the class of 2004 graduates shows that approximately 74 percent of the class earned a diploma in four years. Of those enrolled in twelfth grade in 2004, 94 percent graduated. The estimated cumulative dropout rate for the class of 2004 was 10 percent compared to rates of 14.2, 13.0, and 11.2 percent for the 2001, 2002, and 2003 classes. Analyses suggest that student retention and dropout rates are significant factors affecting statewide graduation results. Population changes such as student migration into

and out of Virginia's schools, and enrollment in home-schooling and private schools are not significant factors affecting statewide graduation results.

The on-time graduation rate varied according to student characteristics. The on-time graduation rate for White students in the class of 2004 was 77.4 percent, which was substantially higher than the rate for either Black students (61.3%) or Hispanic students (66.5%). Graduation rates for White students have remained relatively constant; rates for Blacks and Hispanics dropped significantly from 2003 to 2004 (4.9% and 11.6%, respectively). A higher percentage of female students graduated (78 %), than male students (69%) in 2004.

Significant variation in graduation rates also exists among school divisions based on size and region. The four largest divisions in the state had the highest graduation rate. Highest graduation rates were also reported in northern Virginia. The lowest graduation rates in the state are in southeast and southside Virginia. Division-level graduation rates are influenced to a greater extent by student population changes than the state-level figures.

The greatest change in type of diploma obtained for the class of 2004, compared to the previous year, was a drop in the percentage receiving the standard diploma (from 49% to 47%) and an increase in the percentage of students receiving the modified standard diploma (from .5% to 2%) and special diploma (2.7% to 3.6%). This trend was much greater for Black male students for modified standard and special diplomas, and male Hispanic students for modified standard diplomas, than for White students. The percentage of students receiving the advanced diploma has remained constant over the last three years, though only about 30 percent of Black students obtain an advanced diploma compared to about 50 percent of White students.

As a result of education reform initiatives in Virginia, the 2003-04 academic year marked the first time students were required to earn verified credits by passing high school Standards of Learning (SOL) tests to graduate. Receipt of locally awarded verified credits was an option for students who did not pass the necessary SOL tests. Approximately 3,000 students received locally awarded verified credits to meet graduate requirements; nearly 90 percent of these students were awarded one credit (54%) or two credits (32%). Slightly more students were awarded verified credits for history/social

science, than for science. Only about 1,400 students needed standard units of credit to graduate, mostly in English, social science, and mathematics. Approximately 900 non-graduates needed both standard and verified units of credit. Nearly 80 percent of non-graduates needed one (56%) or two standard units of credit to graduate (24%); 55 percent needed a verified unit of credit in English/Writing. The lower cumulative dropout rate for the class of 2004 compared to previous years suggests that the 2004 requirements for verified credits may have actually reduced the dropout rate, though the present study is unable to confirm this conclusion.

According to the results of the school division survey, over 4,000 students in the class of 2004 participated in Project Graduation programs. Based on partial responses from school divisions 58 percent of participating students received verified credits and 34 percent graduated. These percentages are somewhat lower than other data reported about the effectiveness of the program. Division personnel identified lack of student motivation, scheduling conflicts, and lack of transportation as factors that limited student participation in Project Graduation. Over 6,000 students participated in Term Graduation testing, with 65% of these students receiving verified credit.

Graduation rate trend analyses show that the 2004 on-time graduation rate, while 3% lower than 2003, is very similar to the rates in 2001 and 2002. This suggests that the drop from 2003 to 2004 may represent a return to a more typical graduation pattern. However, the drop from 2003 to 2004 suggests that there has been shift in the percentage and type of degree awarded to Black and Hispanic high school students. Specifically, for Black students, the shift is from a standard diploma to modified standard and special diplomas, and for Hispanics, a shift from a standard diploma to a modified standard diploma. While some differences are related to region of the state as well as division size, which suggests targeting of resources, the pattern of this change appears to be statewide. Since the percentage of male students graduating is lower than female students, the groups of students most at risk of failure appear to be Black and Hispanic males.

Relatively few twelfth grade students needed more than one verified credit or standard unit of credit to graduate. The high degree of success of the Term Graduation program, and some Project Graduation initiatives, as well as programs provided by the

divisions, coupled with the relatively few number of students needing extended work, suggests that Virginia twelfth graders have ample opportunities to receive a diploma, albeit for some a modified standard or special diploma. Success in courses was more of a deterrent to receiving a diploma than passing SOL tests. Overall, the data suggest that while there may be some negative consequences for graduation associated with high-stakes testing for specific groups of students, there is little evidence that there have been dire consequences for most students.

This nonexperimental study cannot determine causes for the change in percentages of students receiving diplomas in 2004. Since this is the first graduating class that was required to have verified credits to graduate with an advanced or standard diploma, this change in requirement could very well be a significant factor for some students. Identifying causes for the shift in type of diploma awarded, including the effect of changing requirements, should be a research priority in the future.

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Introduction and Background

In 1995 the Virginia Board of Education established Standards of Learning (SOL) that defined new, higher academic expectations for students in each grade level, K-12, in the core academic subjects. In 1996 there was an initiative to develop tests to measure student progress toward meeting these higher standards. Field tests of the new assessments were undertaken in 1997, and first official administration was in 1998. Another key component to educational reform in Virginia was the revision to the Standards of Accreditation (SOA) in 1997. This revision linked school accreditation to SOL test performance, beginning in 1999-2000. As a result of these new standards, school accreditation is tied to student SOL test performance. The need to show levels of student proficiency has resulted in the high-stakes nature of Virginia's state testing program. Nationally, requirements related to the No Child Left Behind (NCLB) act, particularly for showing adequate yearly progress in the participation and performance of subgroups of students, have increased the stakes even further.

In addition, the Board of Education linked high school graduation with performance on end-of-course tests, resulting in high-stakes consequences for students who do not pass the SOL tests. Beginning with the graduating class of 2004, students needed to obtain passing scores on specific tests to receive a diploma. Successful test performance allowed students to obtain "verified" credits required for graduation. Beginning with the 2003-04 ninth grade class, verified credits must be obtained in specific subjects.

It is with good reason, then, that there is much interest about the 2004 graduating class – the first class of students who have had to meet the more rigorous graduation requirements. The demand for both student and school accountability is higher than perhaps any previous time in Virginia history. Specific, serious consequences are tied to test scores for schools and for students. New graduation requirements are now official. Much has been anticipated about the impact of the full implementation of the high-stakes testing program. It is within this context that the current study has been completed. Appropriately, there is a need to investigate this class to better understand: (1) the impact of stronger accountability and higher student expectations on high school graduation,

(2) what was effective in helping students to graduate, (3) why some students did not graduate, and (4) what students do after they leave high school.

There are many ways to conceptualize and calculate what is generally called "graduation rate." Clearly, graduation rate is not the same as dropout rate. Dropout rate typically refers to the percentage of students who leave school and do not re-enroll in another school. These numbers can refer to a single grade or several grades. This percentage, often between 2-5 percent per grade, is different from graduation rates that are calculated based on ninth grade enrollment and numbers of graduates four years later (on-time graduation), or on 17-year-olds who obtain a high school diploma (Barton, 2005). The on-time rate has increasingly been used as the indicator of graduation success. National data suggest that this rate may be below 70 percent. For example, of 1997 ninth grade students nationally, only 68 percent graduated within four years with a regular diploma, a significantly lower level than the rate in the 1970s, which was about 75 percent (Miao & Haney, 2004; Swanson, 2004).

While the calculation of graduation rates may seem straightforward, it is a complex endeavor that warrants careful consideration of methods and data used to determine the extent to which students are successfully completing high school. Adding to the complexity is that methods used across states vary, often rendering state-by-state comparisons difficult. In an effort to resolve the lack of comparative information and provide for a common method for calculating the graduation rate, a federal definition was included in the 2001 re-authorization of the Elementary and Secondary Education Act. The No Child Left Behind Act (NCLB), defines the high school graduation rate as:

> *The percentage of students, measured from the beginning of high school, who graduate from high school with a regular diploma (not including an alternative degree that is not fully aligned with the State's academic standards, such as a certificate or a GED) in the standard number of years* (34C.F.R. §200).

For the purposes of this report, two estimates of Virginia's graduation rate for the 2001-2004 classes have been calculated. The first estimate, referred to as the "on-time diploma graduation rate" is the ratio of the number of students who received an advanced, standard, modified standard, or special diploma to the number of students enrolled in ninth grade four years earlier. The second estimate, referred to as the "percent of ninth grade completion rate," is the ratio of the total number of completers to the ninth

grade enrollment four years earlier. The first estimate most closely resembles the federal definition of the high school graduation rate set forth in NCLB. In both cases the estimates are based on calculations that account for the standard number of years required to complete high school.

When interpreting graduation rates an important consideration is the data included in the calculation method. During the last several years, researchers have put forth various ways to calculate the graduation rate while adhering to the principles established in NCLB. These methods vary in complexity and how year-to-year changes in student grade progression and enrollments are addressed (see for example Greene, 2002 and Swanson & Chaplin, 2003). In a review of the various methods used to calculate graduate rates, Miao and Haney (2004) conclude that more complex methods for calculating graduation rates provide similar results and do not "yield more accurate or valid graduation rate estimates than the simple methods" (p. 55). The authors recommend the use of simple methods, such as calculating graduation rates as a ratio of the number of graduates relative to Grade 9 enrollments, which are similar to those used in this study.

Purpose

The overall purpose of this study was to profile the high school class of 2004. To meet this goal the study focused data collection and analysis in four areas, which provide an organization for presenting the results:

- Profile of the class of 2004 graduates and completers
- Profile of the class of 2004 non-graduates
- Graduation and completion trends from 2001-2004, broken out by type of diploma, race/ethnicity, gender, division size, and region of the state
- Remedial initiatives to ensure student graduation

More specific questions that guided the data analyses included the following:

1. What percentage of 2001 ninth grade students graduated from or completed high school in four years, broken out by race/ethnicity, gender, division size, and region of the state?
2. What percentage of 2004 graduating students earned advanced, standard, modified standard, or special diplomas?

3. What percentage of standard diploma earning students received locally awarded verified credits?
4. What was the percent of locally awarded verified credits by subject area?
5. What percentage of students earning a modified standard diploma used different substitute assessments?
6. What percent of students who expected to earn a modified standard diploma in 2004 actually earned a special diploma?
7. What are the post-graduation plans of the 2004 graduates?
8. What percent of non-graduates expected to earn an advanced or standard diploma needed verified units of credit, broken out by number of credits needed and subject area?
9. What percent of non-graduates expected to earn an advanced or standard diploma needed standard units of credit in different by subject areas?
10. What percent of non-graduates expected to earn an advanced or standard diploma needed both verified and standard units of credit in different subject areas?
11. What percent of non-graduates expected to earn a modified standard diploma needed standard units of credit in different subject areas?
12. What percent of non-graduates expected to earn a modified standard diploma needed to pass a literacy or numeracy test?
13. What percent of non-graduating students continued in higher education, enrolled in a GED program, continued in high school, enrolled in a community college, enrolled in a grade school, began full time work, or entered the military?
14. What percent of students statewide, broken out by race/ethnicity, gender, division size, and region, completed high school for the classes of 2001-2004?
15. What percent of students statewide, broken out by race/ethnicity, gender, division size and region earned, advanced, standard, modified standard and special diplomas for the classes of 2001-2004?
16. How many students participated in Project Graduation, WorkKeys Writing Assessment, and Term Graduation Testing?
17. What percentage of students participating in Project Graduation initiatives received verified credits and graduated?

18. What student and school division factors kept students from participating in Project Graduation initiatives?

Methodology

Design. This nonexperimental research utilized both secondary data analysis and survey methodology. Trend analyses are presented based on existing data provided by the Virginia Department of Education. A survey was utilized to gather additional information from the school divisions.

Mail Survey. The CEPI and the Survey and Evaluation Laboratory (SERL) at VCU worked together to develop a division-level mail survey containing questions about both graduates and non-graduates. The *Virginia 2004 High School Graduates and Non-Graduates School Division Survey* was developed and pilot tested in September and October, 2004. A copy of the survey is included in Appendix A.

In early October 2004, the Virginia Department of Education distributed a pre-survey memorandum. This informed school divisions of the upcoming survey and encouraged full participation. In mid-October, SERL sent the survey to school divisions via certified mail. Subsequently, SERL made follow-up phone calls to non-responding divisions. The Department also sent a second memorandum to non-responding divisions. The initial November 4, 2004 deadline was extended to November 24, 2004 pursuant to feedback from the school divisions. The final deadline for obtaining the surveys was January 28, 2005.

In total 125, out of 134 divisions[1] returned completed surveys. Three divisions were contained in responses of larger divisions, resulting in a response rate of 95%.

Secondary Data. The Virginia Department of Education provided CEPI with Excel files for years 2001-2004. Data elements included, at the state and division level, ninth grade membership, type of diploma received, type of completion other than diploma (GED, ISAEP, or certificate of completion), division, race/ethnicity, gender, and school membership. All 134 divisions were represented in each data file. Although

[1] Divisions not responding were Galax City, Montgomery County, Petersburg City, Poquoson City, Pulaski County, and Rockbridge County.

correctional education sites were included in the Excel files, they were excluded from all analyses and their contribution to state-level totals was removed.

Data Management. SPSS 12.0 was used for all analyses. Most analyses were done using a merged file containing primary data from the *Virginia 2004 High School Graduates and Non-Graduates School Division Survey* and secondary data from the Department of Education.

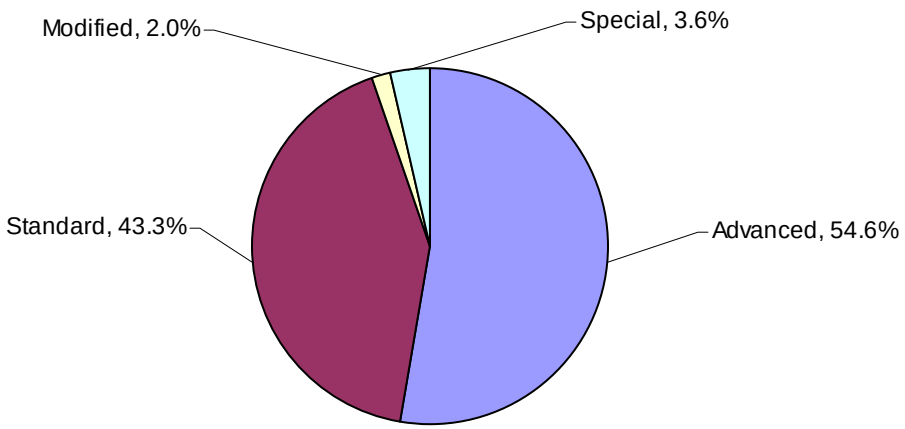
Findings: Profile of the Class of 2004 - *Graduates*

This section presents a profile of the Virginia high school graduating class of 2004. Information about the graduates was based on two sources of data: 1) school division reports of the status of students, aggregated to the state level; and 2) a survey of school divisions requesting information about graduates. The following research questions guided the analyses in this section.

1. What percentage of 2001 ninth grade students graduated from or completed high school in four years, broken out by race/ethnicity, gender, division size, and region of the state?
2. What percentage of 2004 graduating students earned advanced, standard, modified standard, or special diplomas?
3. What percentage of standard diploma earning students received locally awarded verified credits?
4. What was the percentage of locally awarded verified credits by subject area?
5. What percentage of students earning a modified standard diploma used different substitute assessments?
6. What are the post-graduation plans of the 2004 graduates?

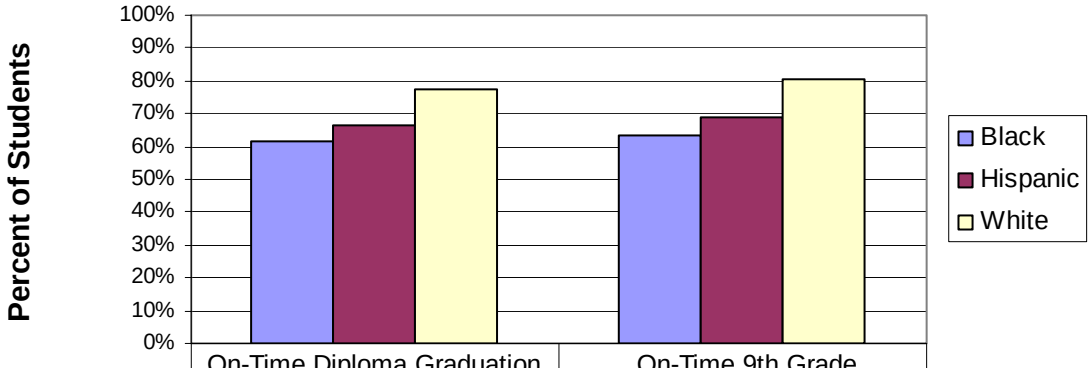
Calculated as a percentage of the 2001 ninth grade enrollment, 73.5 percent students graduated with one of four types of diplomas (advanced, standard, modified standard, and special), and 76.5 percent of students were completers (receiving a diploma, GED, ISAEP, or certificate of completion). Of students receiving a diploma, the majority (54.6%) earned an advanced diploma, 43.3 percent received a standard diploma, 2 percent received a modified standard diploma, and 3.6 percent received a special diploma (see Figure 1).

Figure 1. 2004 Diplomas Awarded by Type



As illustrated in Figure 2, high school graduation and completion rates are highest for White students, with lower rates for both Black and Hispanic students for 2004. Over three-fourths of the White student population earned one of the four types of diplomas. By comparison, roughly two-thirds of Hispanic and Black students graduated.

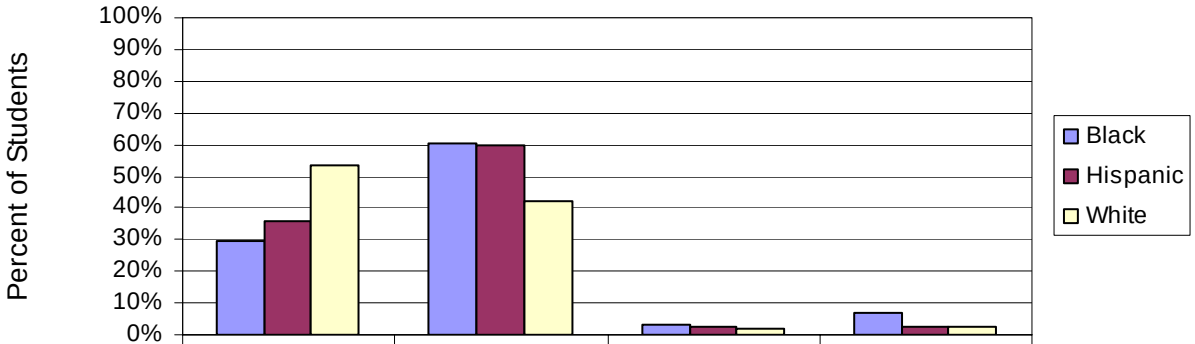
Figure 2. 2004 On-Time Diploma Graduation Rate and On-Time 9th Grade Completion Rate by Race/Ethnicity



	On-Time Diploma Graduation Rate	On-Time 9th Grade Completion
Black	61.3%	63.6%
Hispanic	66.5%	69.1%
White	77.4%	80.7%

When the percentage of students graduating is broken out by the type of diploma earned and by race/ethnicity, clear differences among student groups emerged. As shown in Figure 3, White students (53.5%) were more likely to receive an advanced diploma than their Hispanic (35.6%) or Black counterparts (29.8%). Not surprisingly, greater percentages of Black (60.1%) and Hispanic (59.6%) students graduated with a standard diploma compared to White students (42.3%). Black students were three times more likely, and Hispanic students were twice as likely, to earn a modified standard diploma than were White students. Black students also earned special diplomas at significantly higher rates than Hispanic or White students.

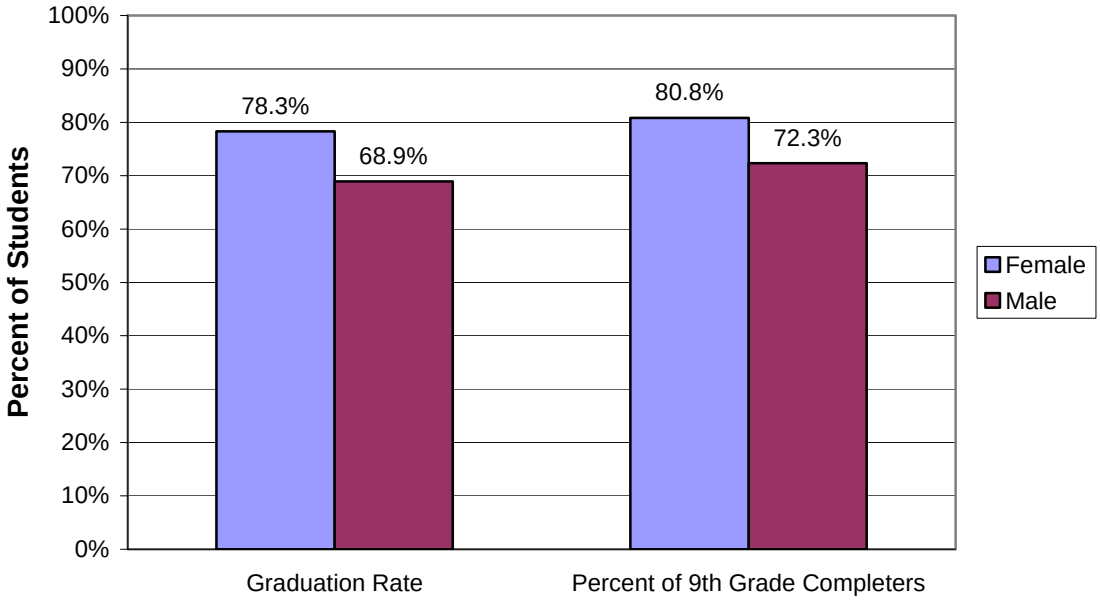
Figure 3. 2004 Percent of Students Earning Advanced, Standard, Modified Standard, and Special Diplomas by Race/Ethnicity



	Advanced	Standard	Modified	Special
Black	29.8%	60.1%	3.3%	6.8%
Hispanic	35.6%	59.6%	2.5%	2.4%
White	53.3%	42.3%	1.6%	2.8%

Based on 2001 ninth grade enrollment, 48 percent of the class of 2004 was female and 52 percent male. Greater percentages of females graduated with an advanced, standard, modified standard or special diploma compared to males. As shown in Figure 4, females earned one of the four diplomas and/or completed high school at rates 10 percent higher than males.

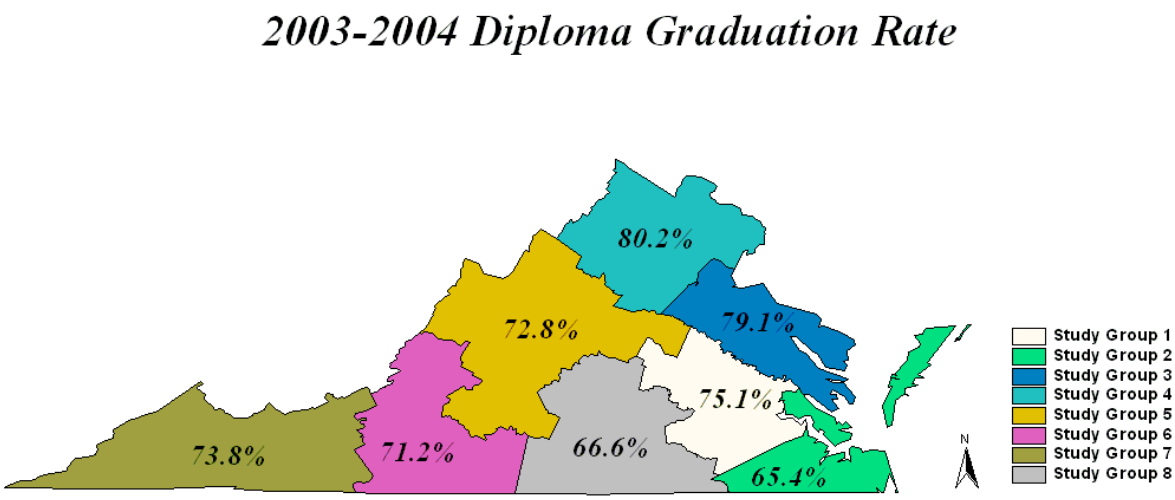
Figure 4. 2003-2004 On-Time Diploma Graduation and Ninth Grade Completion Rates by Gender[1,2]



1. Graduation Rate: ((Advanced+ Standard + Modified standard + Special) / 9th grade enrollment for graduating class) *100. The graduation rate has been adjusted to exclude students enrolled in the Department of Correctional Education.
2. Percent of 9th Grade Completing: ((Total completers / 9th grade enrollment for graduating class)*100). The percent of 9th Grade Completion rate has been adjusted to exclude students enrolled in the Department of Correctional Education.

Graduation rates were also examined as a function of region of the state and division size. Figure 5 illustrates graduation rates of different regions of the state as defined by the Superintendents' Study Groups. An 80 percent graduation rate was achieved by Region 4 (Northern Virginia). The lowest rates were reported in Regions 2 (65%) and 8 (67%).

Figure 5. 2004 Regional On-Time Diploma Graduation Rate



Similar to regional differences, the graduation rate for the class of 2004 also varied by division size. Each division was classified into one of five categories, ranging from very small to very large, based on division enrollment (Appendix B provides a list of which divisions comprise each size classification category). The graduation rate for the four largest divisions (Chesterfield, Fairfax, Prince William, and Virginia Beach) was highest at 78 percent, while large divisions (n=37) were lowest at 70 percent. Very small, small, and mid-size divisions were about the same, ranging from 72-73 percent.

Locally Awarded Verified Credits

Awarding students local verified credits in history/social science and/or science allowed them to meet the verified credit requirements of the standard diploma. In an effort to assess the extent to which divisions had formalized policies in place for the

awarding of local verified credits, the *Virginia 2004 High School Graduates and Non-Graduates School Division Survey* contained several questions related to this issue. Of the 125 school divisions that responded to the survey, 124 reported that they had a policy for awarding locally verified credits. In addition, 97 percent of the responding divisions indicated that they exercised the policy for awarding locally verified credits.

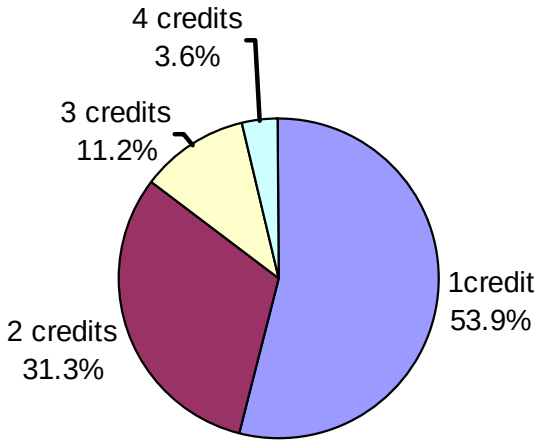
In the survey, divisions were asked to report the number of students who earned standard diplomas in 2004 who received one or more locally awarded verified credits in order to graduate. Table 1 shows the percent of students who earned standard diplomas that required locally awarded credits. The total number of students who earned standard diplomas for the 119 divisions that responded to the survey item was 31,448. This number was used to calculate the percent of students who required either one, two, three, or four locally awarded verified credits to earn a standard diploma. As shown, the percent of students who received locally awarded verified credits to earn standard diplomas in 2003-04 was relatively small. Of those who earned standard diplomas, 5.9 percent required one and 3.4 percent required two locally awarded verified credits. A very small percentage received three or more.

Table 1. Percent of Standard Diploma Earning Students 2003-2004 Awarded Local Verified Credits

# of Verified Credits Needed	Percent (n) of Students Earning Standard Diplomas	Number of Divisions Reporting
1	5.9% (1862)	101
2	3.4% (1082)	94
3	1.2% (387)	76
4	.39% (123)	62

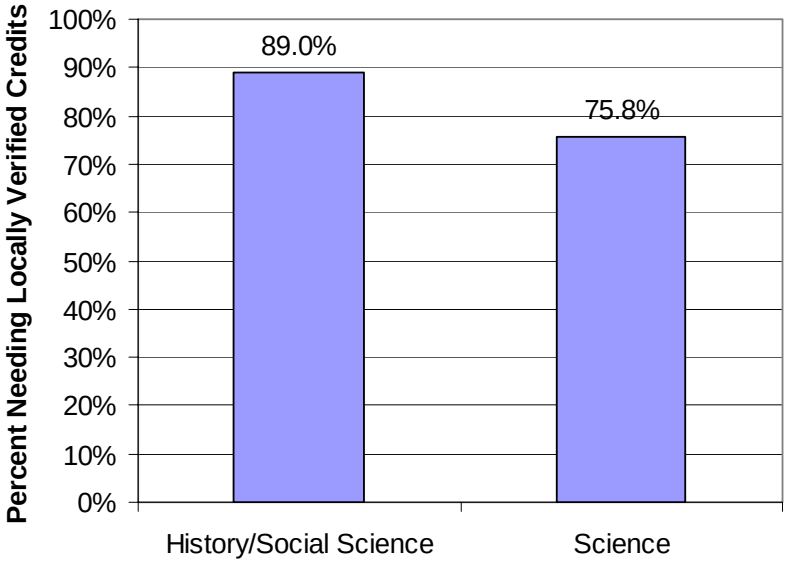
Figure 6 illustrates the percent of 2003-04 graduates who required locally awarded verified credits to earn a standard diploma. Of the 3,454 students (based on the number reported by the 119 divisions that responded to this survey item) the majority required only one locally awarded verified credit to graduate. By comparison, less than a third (31.3%) required two and 11.2 percent needed three credits. Of the students who were awarded local verified credits, less than 5 percent required four.

Figure 6. Percent of 2003-2004 Graduates Awarded Local Verified Credits by Number of Credits Awarded



In addition to providing information about the number of students who received locally awarded verified credits, school divisions were asked to indicate the number of students that required these credits by subject area. The results are shown in Figure 7. Of the 3,454 students that received locally awarded credits, a larger percentage required them for a history or social science course (89.0%) than for a course in science (75.8%). Note that the results presented in Figure 7 are based on the information reported by the divisions that responded to the item concerning the number of students who received locally awarded verified credits.

Figure 7. Percent of Graduates Awarded Local Verified Credits by Subject Area



2004 Graduates Earning Modified Standard Diplomas

Of the 125 divisions that responded to the survey, an overwhelming majority (92.8%) reported that they awarded one or more modified standard diplomas for the 2003-04 academic year. Table 2 shows the number of students who used the various assessments to meet the modified standard diploma graduation requirements. Caution should be used when interpreting the information presented in Table 2, based on the small number of divisions that responded to the survey item.

Table 2. Assessments Used by Modified Standard Diploma Earning Students

Assessments	Number of Students	Number of Divisions Reporting
Literacy (8th grade Reading SOL)	128	41
End of Course English: Reading	117	25
WorkKeys: Reading for Information	17	14
ACT: EXPLORE Reading Test	0	9
Numeracy (8th grade Math SOL)	92	36
End of course Mathematics	120	27
WorkKeys: Applied Mathematics Test	14	14
ACT: EXPLORE Mathematics Test	1	12

2004 Graduates Earning Special Diplomas

Divisions were asked to report the number of students who expected to earn a modified standard diploma but instead graduated with a special diploma. Of the 120 divisions that responded to this survey item, they reported that a total of 272 students graduated with a special diploma but had anticipated earning a modified standard diploma. Of the total number of students expecting to earn a modified standard diploma (actually earned a modified standard diploma [1,339] for the responding divisions + expected to earn a modified standard but earned a special diploma [272]) 16.8 percent graduated with a special diploma for the 120 responding divisions.

Post-Graduation Plans of the 2004 Graduates

In an effort to examine the extent to which the 2004 graduates realized their intended plans after graduation, school divisions were asked to report on where their 2004 graduates actually were as of September 1, 2004. The specific post-graduation options included: 1) enrolled in a four year college, 2) enrolled in a community college, 3) enrolled in a trade school, 4) in the military, 5) working full-time, and 6) other.

Table 3 shows the number of students reported for each category and the number of students in the analogous category supplied by the Virginia Department of Education for the responding school divisions. As indicated, the results for each category are fairly similar, suggesting that the vast majority of the 2004 graduates carried out their intended post-graduation plans.

Table 3. Percent of 2004 Graduates Enrolled in College or Trade School, in the Military, or Working Full-Time

Graduate Status as of September 1, 2004	# of Graduates Reported in Division Survey	# of Graduates According to VA DOE Data	# of divisions reporting "Don't Know"	# of divisions not responding
Enrolled in a 4 year college/university	16,192	16,129	6	27
Enrolled in a community college	10,336	9,956	6	27
Enrolled in a trade school	1,435	[1]	6	32
In the military	1,271	1,286	7	31
Working full-time	5,115	5,201	9	32
Other	1,307	[2]	6	49

1. The number of students enrolled in a trade school is not reported in the data provided by the Virginia Department of Education; 3,134 students enrolled in other continuing education programs reported by the divisions that responded to this survey item.
2. The data provided by the Virginia Department of Education did not include an "other" category but rather a "no plans" category. The sum of students reported as having "no plan" to the VA DOE by the divisions that responded to related survey item is 1,736.

Findings: Profile of 2004 - *Non-Graduates*

This section reports on information gathered from the *Virginia 2004 High School Graduates and Non-Graduates Division Survey* regarding non-graduates. The extent to which students who had expected to graduate with either an advanced, standard, or modified standard diploma but failed to meet the diploma requirements is described. In particular, the degree to which non-graduates needed to earn verified and/or standard units of credit or pass an assessment in order to graduate is discussed. The following research questions are addressed:

1. What percent of 2004 non-graduates expected to earn an advanced or standard diploma needed verified units of credit, broken out by number of credits needed and subject area?
2. What percent of 2004 non-graduates expected to earn an advanced or standard diploma needed standard units of credit in different subject areas?
3. What percent of 2004 non-graduates expected to earn an advanced or standard diploma needed both verified and standard units of credit in different subject areas?
4. What percent of 2004 non-graduates expected to earn a modified standard diploma needed to pass a literacy or numeracy test?
5. What percent of 2004 non-graduates expected to earn a modified standard diploma needed standard units of credit in different subject areas?
6. What percent of 2004 non-graduating students continued in higher education, enrolled in a GED program, continued in high school, enrolled in a community college, enrolled in a grade school, began full time work, or entered the military?

Non-Graduates Expected to Earn an Advanced or Standard Diploma

As part of the *Virginia 2004 High School Graduates and Non-Graduates School Division Survey*, divisions were asked to provide the number of students expected to earn an advanced or standard diploma in 2004, but instead ended up not graduating. Of the 125 divisions who returned a completed survey, 90 responded to this question. According to these divisions, a total of 1,885 students expected to earn a standard or advanced diploma did not graduate. In order to determine the percent of students who expected to graduate but did not, a total for expected graduates was derived. This total was calculated by summing the number of students who received advanced (28,776) and standard (27,732) diplomas from the 90 divisions with the number who expected to graduate with one of these two diplomas but did not (1,885). As a result, of those students who expected to graduate in 2004, 3.3 percent did not.

In order to earn a standard diploma in 2003-04 a student had to earn two verified credits in English (one in writing and one in reading) by passing the high school SOL tests in English/Writing and English/Reading. In addition, students also needed four verified credits in subjects of their choice by passing any of the SOL tests offered in mathematics, history/social science and/or science. Divisions were asked to report on the number of non-graduates who needed verified units of credit in order to graduate. This number totaled 383 non-graduates according to the responding divisions (n = 64). Figure 8 shows the percent of these students who needed one, two, three, or more than three verified units of credit to graduate. As shown, the majority of non-graduates (214) needed only one verified credit, while a fourth (92) needed two credits. Roughly equal numbers of non-graduates needed three (38) or more (39) to earn an advanced or standard diploma.

Figure 8. Percent of 2004 Non-Graduates Expected to Earn a Standard or Advanced Diploma Needing One, Two, Three, or More Than Three Verified Credits to Graduate

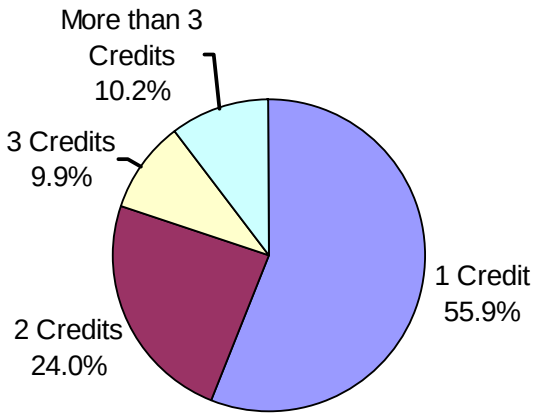
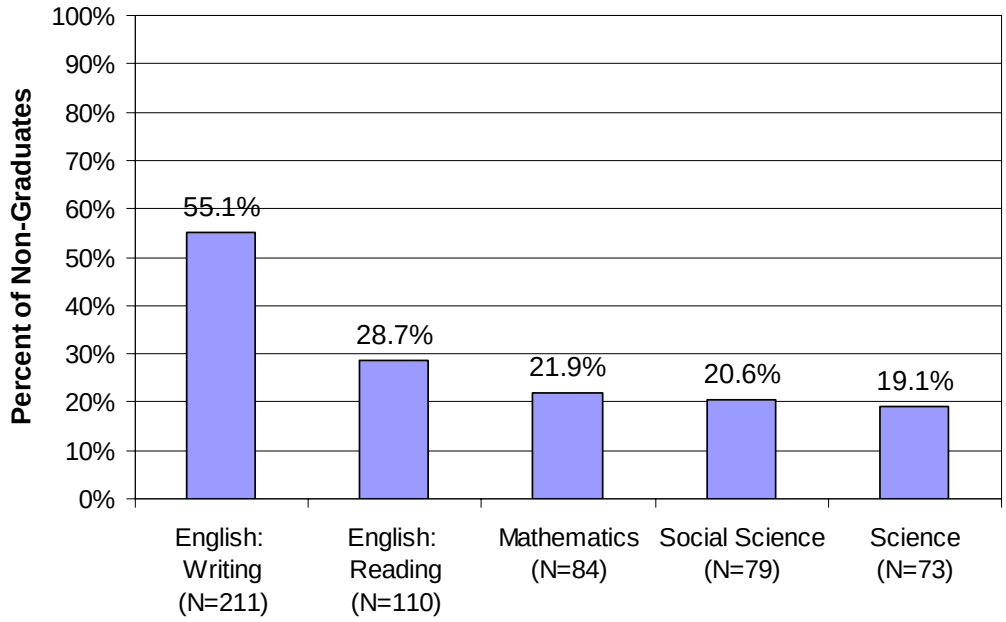


Figure 9 shows the percent of non-graduates who needed verified units of credit in specific subject areas – some of which were required, such as English/Writing and English/Reading and the remaining subject areas (mathematics, social science, and science) were student selected. As shown, the majority (55.1%) needed credits in English/Writing, compared with 28.7 percent who required verified credits in English/Reading. Roughly similar percentages of students needed verified credits in the student-selected subjects of mathematics, science, and history/social science.

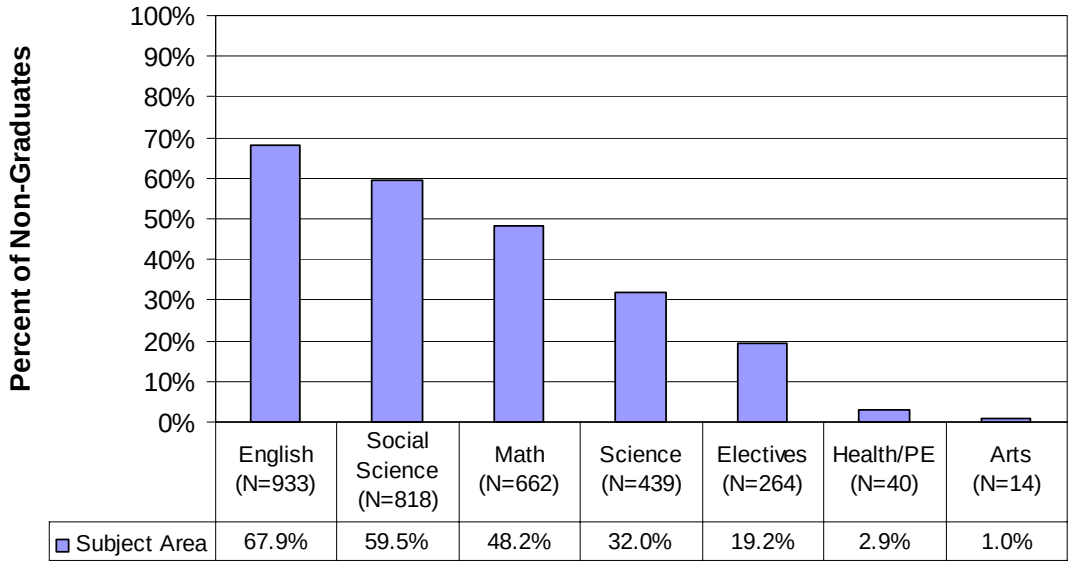
Figure 9. Percent of 2004 Non-Graduates Expected to Earn a Standard or Advanced Diploma Needing Verified Credits by Subject Area[1]
(N = the number of non-graduates).



1. Note that students are required to earn verified credits in English/Writing and English/Reading. Students select to earn verified credits in mathematics, social science, and science.

Similarly, divisions were asked to report on the number of non-graduates who needed standard units of credit only in order to earn an advanced or standard diploma. According to the 101 responding divisions 1, 374 non-graduates required standard units of credit only. Figure 10 shows the percent of these students that needed standard units of credit by subject area. As indicated, English credits were needed by roughly two-thirds of the non-graduates. A majority (59.5%) required credits in history/social science credits compared to 48.2 percent who needed standard units of credit in mathematics. Of the four core content areas, science was the least problematic – 32 percent of non-graduates needed credits in this area. Very small percentages of non-graduates needed credits in health/physical education or the arts in order to earn an advanced or standard diploma.

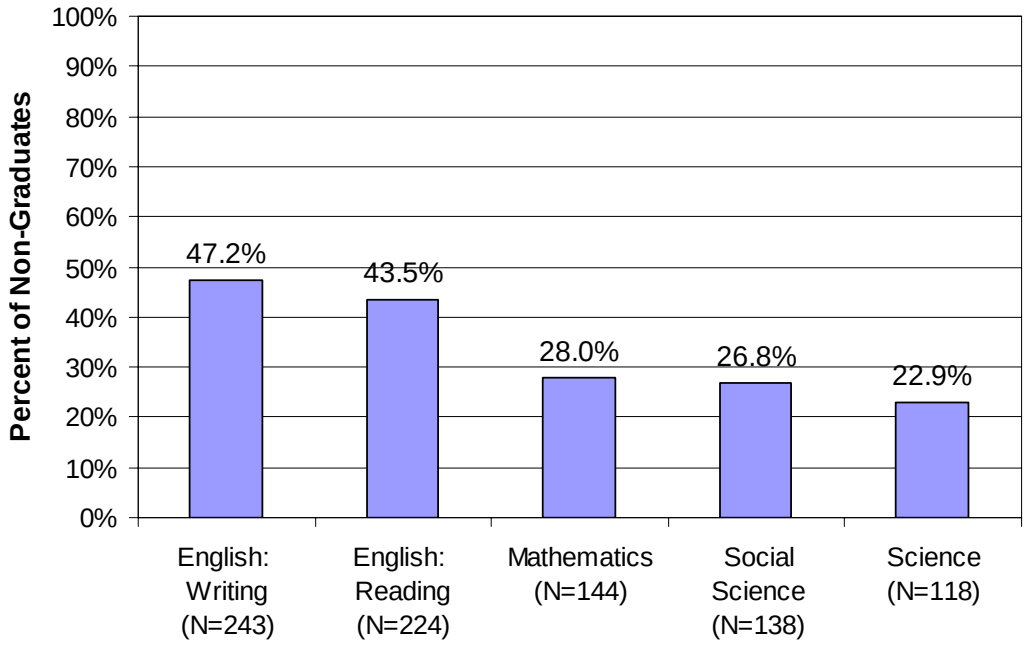
Figure 10. Percent of 2004 Non-Graduates Needing Standard Units of Credit by Subject Area (N = the number of non-graduates)



When asked about the number of non-graduates who needed both verified and standard units of credit to graduate, 106 divisions responded and indicated that 515 non-graduates needed both types of credit in order to earn a diploma. Of the 106 responding divisions, it is important to note that 44 reported that they did not have any non-graduates who required verified and standard units of credit to graduate with an advanced or standard diploma, and 21 reported that only one non-graduate in their division met this description. Figure 11 shows the percent of non-graduates who needed both verified and standard units of credit to graduate by the subject in which the verified credit was required. As shown, the largest percentage required English/Writing (47.2%) and English/Reading (43.5%) credits. Roughly similar percentages, about one-fourth, needed student-selected verified credits in mathematics, history/social science and science. These patterns are fairly similar to those of non-graduates who needed verified credits only in order to earn an advanced or standard diploma (see Figure 9). With both groups of non-graduates, the largest percentage needed verified units of credit in English/Writing. However, the non-graduates who needed both verified and standard units of credit were much more likely to require credits in English/Reading than were non-graduates who needed only verified credits to earn a diploma. Slightly larger

percentages of non-graduates who needed both verified and standard units of credit required verified credits in mathematics, history/social science and science than did non-graduates who needed verified credits only.

Figure 11. Percent of 2004 Non-Graduates Expected to Earn a Standard or Advanced Diploma Needing both Verified and Standard Units of Credit by Type of Verified Credit [1]
(N = the number of non-graduates)

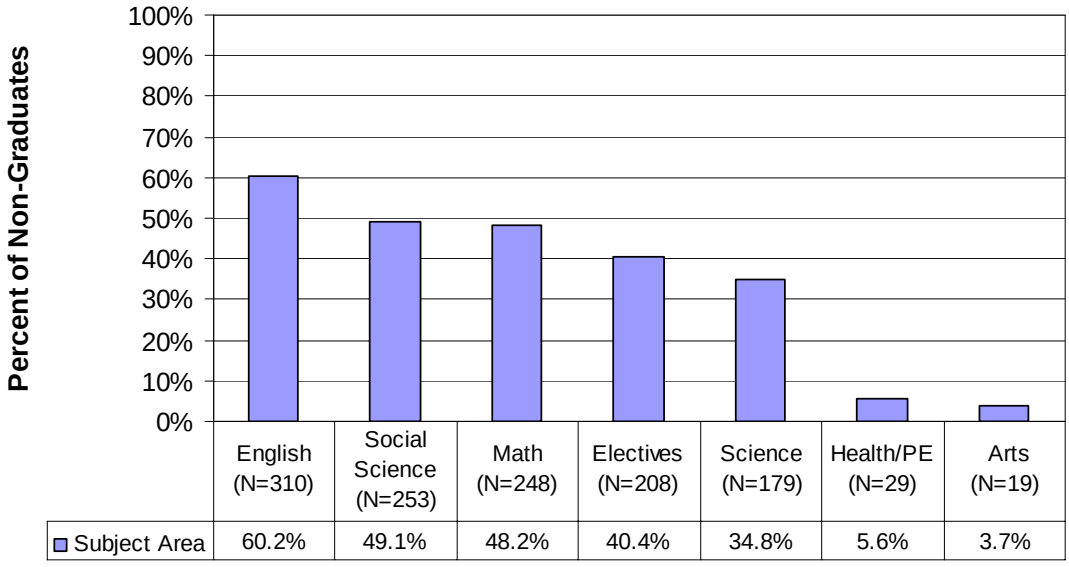


1. Note that students are required to earn verified credits in English/Writing and English/Reading. Students select to earn verified credits in mathematics, social science, and science.

Figure 12 shows the percent of non-graduates who needed both verified and standard units of credit in order to graduate by subject area of the standard credits required. As shown, the largest percent required credits in English (60.2%). Roughly equal numbers of students needed standard credits in history/social science (49.1%) and mathematics courses (48.2%). Of the four core content areas, the smallest number of students needed credits in science (34.8%). A small percent required credits for health/physical education and the arts, however somewhat surprisingly 40.4 percent needed credits in elective courses. These patterns are similar to those non-graduates who needed only standard units of credit to graduate. For both groups, English proved to be the most problematic for the largest percentage of students. History/social science and

mathematics courses presented similar numbers of non-graduates with difficulty, however a greater percentage of students who needed standard units of credit only to graduate, required credits in history/social science (59.5%) than did students who needed both verified and standard credits (49.1%). The only marked difference between the two groups of non-graduates concerned the elective courses. Students who needed both verified and standard units of credit were twice as likely to require credits in elective courses as were the non-graduates needing only standard credits (40.4% and 19.2% respectively). From Figures 9, 10, 11, and 12, it is clear that the English/Writing SOL, especially for students who needed only verified credits, and English courses were most problematic for non-graduates.

Figure 12. Percent of 2004 Non-Graduates Expected to Earn a Standard or Advanced Diploma Needing both Verified and Standard Units of Credit by Standard Units of Credit Subject Area
(N = the number of non-graduates)



Non-Graduates Expected to Earn a Modified Standard Diploma

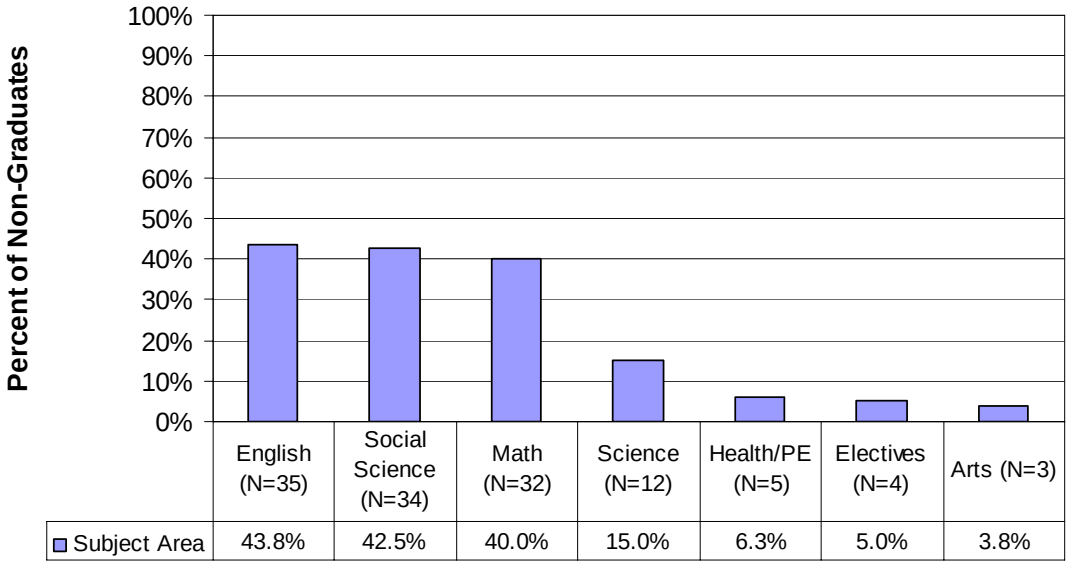
As part of the *Virginia 2004 High School Graduates and Non-Graduates School Division Survey*, divisions were asked if they had any students who expected to earn a modified standard diploma in 2004 but did not graduate. Of 124 responding divisions 105 reported that they did not have any students who anticipated earning a modified standard diploma but did not graduate. By comparison, 19 divisions reported that they did have students who planned on graduating with a modified standard diploma but did not. Of these 19 divisions, 16 provided the actual number of students who met this criterion, for a total of 80 students. In order to determine the percent of students who expected to graduate with a modified standard diploma but did not, a total for expected graduates was derived. This total was calculated by summing the number of students who received a modified standard diploma for these 16 divisions (480) with the number who expected to graduate with a modified standard diploma but did not (80). As a result, 14.3 percent of those who expected to earn a modified standard diploma in 2004 in these 16 divisions ended up not graduating.

As shown in Table 4, of those students in the responding divisions who anticipated earning a modified standard diploma but did not, 15 percent needed to pass a literacy test compared to 37.5 percent who needed to pass a numeracy assessment. Figure 13 shows the percent of these students who also needed standard units of credit to earn a modified standard diploma. Roughly equal numbers of students needed credits in English and history/social science courses. Similar to non-graduates who anticipated earning advanced and standard diplomas, science proved to be the least problematic content area course for non-graduates who expected to earn modified standard diplomas.

Table 4. Percent of 2004 Non-Graduates Expected to Earn a Modified Standard Diploma Needing to Pass a Literacy or Numeracy Assessment

Test Type	Non-Graduates % (N)	# of Divisions Reporting
Literacy	15.0 (12)	11
Numeracy	37.5 (30)	13

Figure 13. Percent of 2004 Non-Graduating Students Who Expected to Earn a Modified Standard Diploma but Ended Up not Graduating by Subject Area of Standard Units of Credit Needed (N = the number of non-graduates)



Where are the 2004 Non-Graduates Now?

Similar to the question about the post-graduation plans of the 2004 high school graduates, school divisions were asked to report on the current activities of their non-graduates. Specifically, school divisions were asked to indicate where the non-graduates were as of September 1, 2004. The options included: 1) continuing in high school, 2) enrolled in a GED program, 3) enrolled in a community college, 4) enrolled in a trade school, 5) in the military, 6) working full-time, and 7) other. Table 5 shows the number and percent of students reported for each category. As indicated, the majority of non-graduates are still continuing with their high school education. Roughly 10 percent are either working full-time or enrolled in a GED program. Small percentages have enrolled in post-secondary educational programs such as community colleges or trade schools or have chosen to go into the military. Caution is warranted when interpreting the results shown in Table 5 because of the large number of divisions that either reported "don't know" or did not respond.

Table 5. Percent of 2004 Non-Graduates Continuing in High School, Enrolled in a GED Program, Community College or Trade School, in the Military and Working Full-Time

Non-Graduate Status as of September 1, 2004	# of Non-Graduates	% of Non-Graduates	# of divisions reporting "Don't Know"	# of non-responding divisions
Continuing in High School	850	55.1	13	21
Enrolled in a GED Program	138	8.9	23	39
Enrolled in a community college	32	2.1	28	55
Enrolled in a trade school	16	1.0	31	53
In the military	20	1.3	30	54
Working full-time	215	13.9	30	30
Other	272	17.6	28	40

Findings: Profile of the 2001-2004 Graduates and Completers

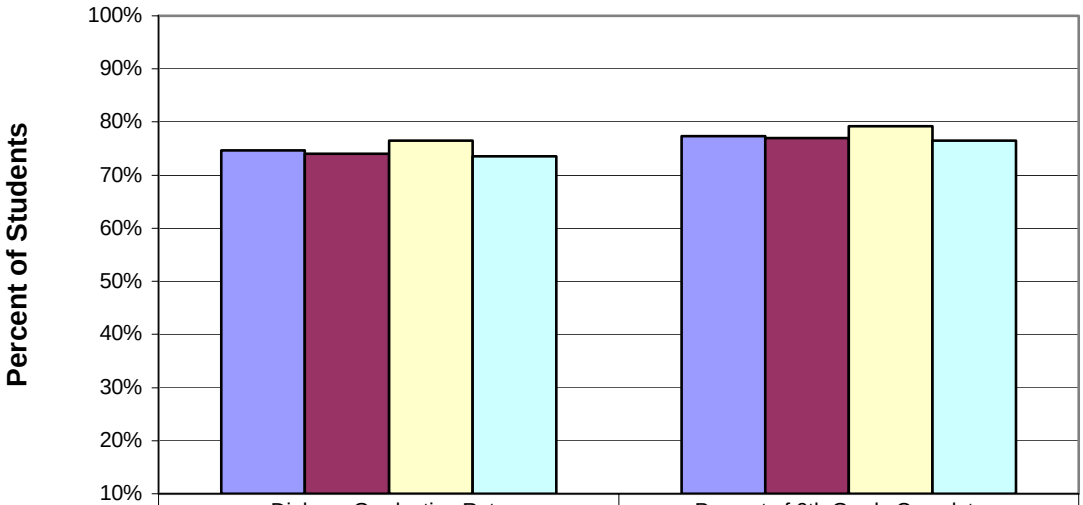
This section presents a profile of Virginia's high school graduates and completers for the classes of 2001-2004. Two data sources are used to describe the last four cohorts of graduates and completers. The first portion of this section reports the results of analyses using data provided by the Virginia State Department of Education. The data included the number of students: 1) enrolled in ninth grade four years prior to the graduation year for the 2001-2004 graduating classes, 2) who received advanced, standard, modified standard and special diplomas, GEDs, ISAEP or certificates of completion, 3) who completed high school, and 4) reflected in total fall division membership. With the exception of ninth grade enrollment of males and females for the 2001-2003 classes, these data were disaggregated by race/ethnicity and gender for the 2001-2004 cohorts. A portion of this section uses data gathered from the *Virginia 2004 High School Graduates and Non-Graduates Division Survey*. The following research questions are addressed in this section of the report:

1. What percent of students statewide, broken out by race/ethnicity, gender, division size, and region, completed high school for the classes of 2001-2004?
2. What percent of students statewide, broken out by race/ethnicity, gender, division size and region earned, advanced, standard, modified standard and special diplomas for the classes of 2001-2004?
3. What factors influence the 2001-2004 statewide graduation rate trends?

2001-2004 On-Time Diploma Graduation and Completion Rates

Figure 14 shows the on-time diploma graduation and percent of ninth grade completion rates for the classes of 2001-2004. Generally the on-time graduation rate has been fairly stable over the last four years at an average of about 75 percent. Across each index the results are similar for 2000-01 and 2001-02 (74.7% and 74.0% respectively) with a slight increase in 2002-03 to 76.4 percent. This slight increase is followed by a similar decrease to 73.5 percent in 2003-04.

Figure 14. 2001-2004 On-Time Diploma Graduation and Completion Rates[1,2,3]



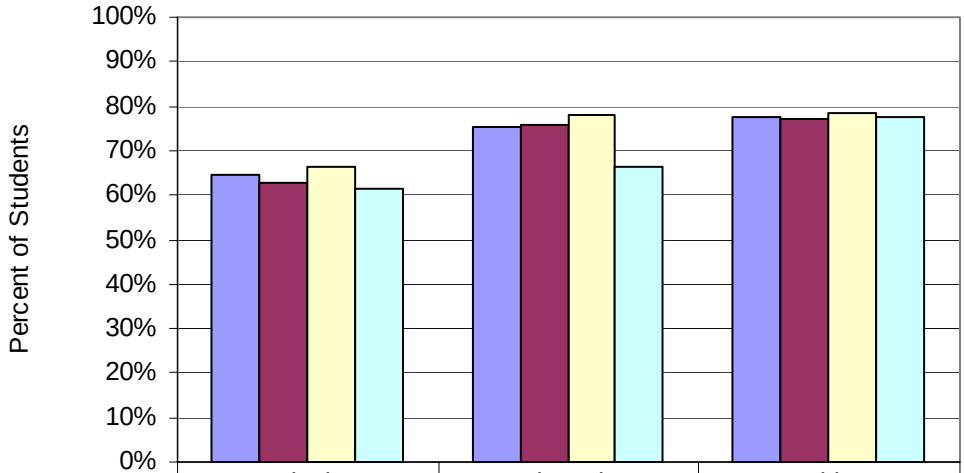
	Diploma Graduation Rate	Percent of 9th Grade Completers
2000-01	74.7%	77.3%
2001-02	74.0%	77.0%
2002-03	76.4%	79.2%
2003-04	73.5%	76.5%

1. Graduation Rate: ((Advanced + Standard + Modified Standard + Special) / 9th grade enrollment for graduating class) *100. The graduation rate has been adjusted to exclude students enrolled in the Department of Correctional Education.
2. Percent of 9th Grade Completing: ((Total completers / 9th grade enrollment for graduating class)*100). The percent of 9th Grade Completing rate has been adjusted to exclude students enrolled in the Department of Correctional Education. Total completers is the sum of the number of students who earned an advanced, standard, modified standard, or special diploma, a GED, ISAEP or certificate of completion.

2001-2004 On-Time Diploma Graduation and Completion Rates by Race/Ethnicity

When the diploma graduation rate for the classes of 2001-2004 is disaggregated by race the results consistently indicate that a greater percentage of White students earned an advanced, standard, modified standard or special diploma compared to Hispanic or Black student populations. As shown in Figure 15, Black students lagged behind their White and Hispanic counterparts and were least likely to earn one of the four diploma types offered by the state. The data show that over the last four years White students have graduated with an advanced, standard, modified standard or special diploma at rates higher than the state average, and Black students have graduated at rates substantially lower.

Figure 15. 2001-2004 On-Time Diploma Graduation Rate by Race/Ethnicity[1]



	Black	Hispanic	White
2000-01	64.4%	75.2%	77.4%
2001-02	62.9%	75.9%	77.0%
2002-03	66.2%	78.1%	78.4%
2003-04	61.3%	66.5%	77.4%

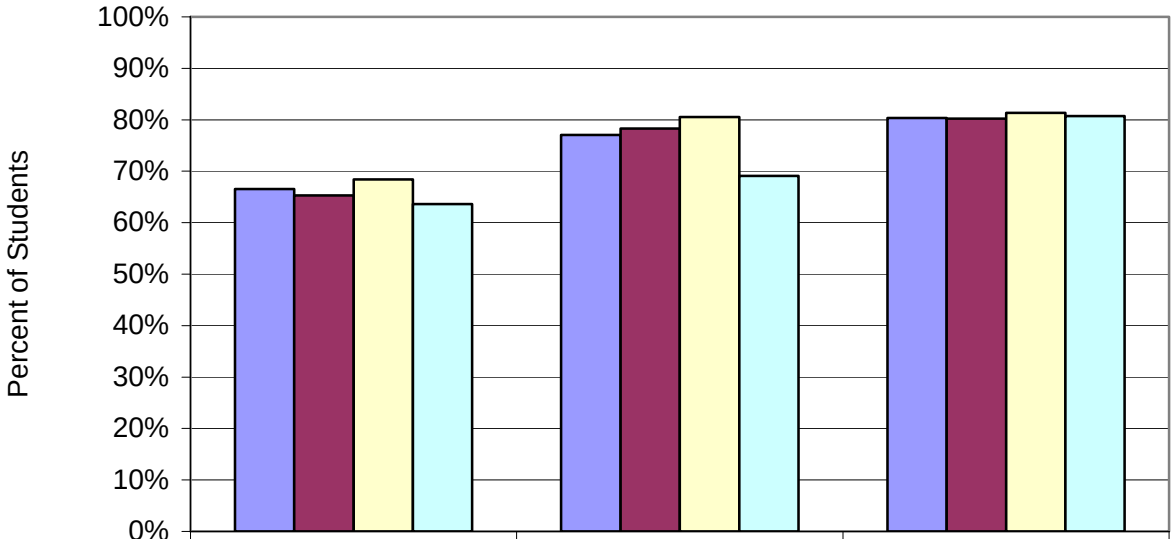
1. Graduation Rate: ((Advanced+ Standard + Modified Standard + Special) / 9th grade enrollment for graduating class) *100. The graduation rate has been adjusted to exclude students enrolled in the Department of Correctional Education.

When the high school completion rate is considered (see Figure 16), the rate at which Black students completed high school is consistently lower than that of Hispanic and White students. Roughly two-thirds of Black students, compared to about 77 percent

of Hispanic and 80 percent of White students, completed high school in four years from 2001-2004. Although the percent of ninth grade completion rate is slightly higher than the diploma graduation rate, the pattern that emerges is similar.

Graduation and completion rates for Black and Hispanic student populations were relatively stable for 2001-2003, however, for 2003-04 the rates of both groups declined. By comparison, the graduation and completion rates for White students have remained stable at roughly 77 percent and 80 percent over the last four years. Regardless of which index is used, a substantially smaller percentage of minority students, particularly Black students, are successfully completing high school compared to their White counterparts.

Figure 16. 2001-2004 On-Time Ninth Grade Completion Rate by Race/Ethnicity[1]



	Black	Hispanic	White
2000-01	66.5%	77.1%	80.3%
2001-02	65.3%	78.3%	80.2%
2002-03	68.4%	80.6%	81.4%
2003-04	63.6%	69.1%	80.7%

1. Percent of 9th Grade Completing: ((Total completers / 9th grade enrollment for graduating class)*100). The percent of 9th Grade Completing rate has been adjusted to exclude students enrolled in the Department of Correctional Education.

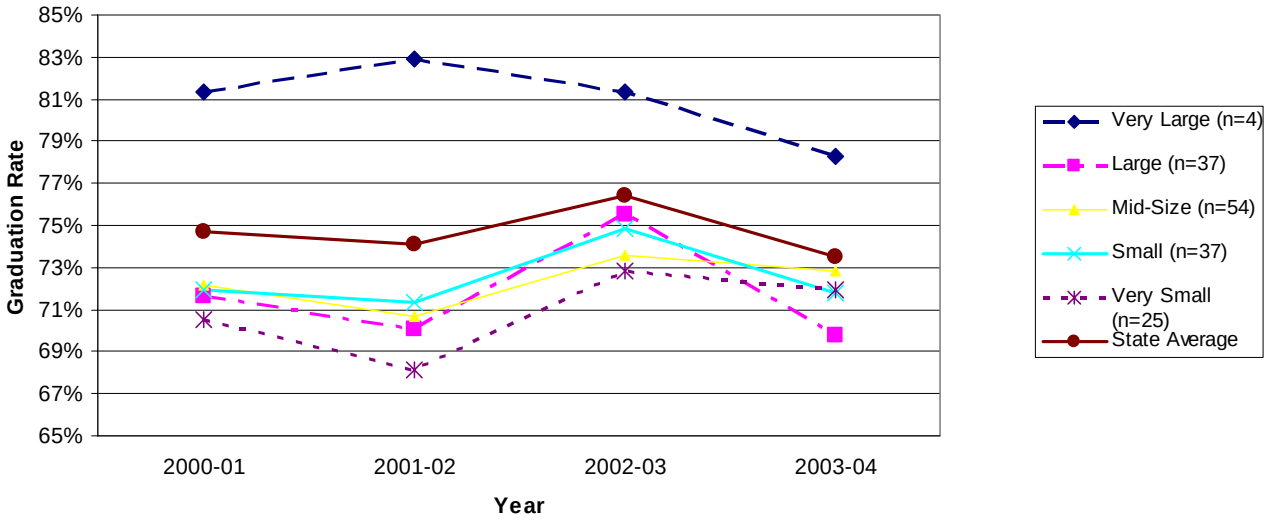
2001-2004 On-Time Diploma Graduation and Completion Rates by Division Size

In addition to examining the statewide on-time diploma graduation and percent of ninth grade completion rates by race/ethnicity and gender characteristics, each index was explored further according to the size of the school division. Each division was classified into one of five categories, ranging from very small to very large, based on the division's total enrollment for 2000-01. In addition, the division classifications were reviewed by individuals familiar with Virginia's school system and division-level characteristics to ensure that division classifications were appropriate. Appendix B provides a list of which divisions comprise each size classification category.

Figures 17 and 18 show the diploma graduation and percent of ninth grade completion rates by division size and include the state average for 2001-2004. Note that in both figures the scale is truncated to show slight differences more effectively. The patterns evident in both figures are similar; the percent of ninth grade completion rates are slightly higher than the diploma graduation rates. This pattern is expected given the difference in the calculation methods. In both figures, the pattern for the "very large" divisions is disparate from the "very small" to "large" divisions. For example, in 2000-01 and 2001-02 both the diploma graduation and the percent of ninth grade completion rates for the "very large" divisions showed a slight increase of roughly 2-3 percent while each index remained fairly stable for "small", "mid-sized" and "large" divisions. In addition, there was a slight decrease of roughly 2 percent in the case of the "very small" divisions. Similarly, 2002-03 shows slight increases in the percent of students earning an advanced, standard, modified standard or special diploma and otherwise completing high school for all of the divisions with the exception of those in the "very large" category. Results for 2003-04 indicate that the diploma graduation and the percent of ninth grade completion rate either decreased slightly or remained stable (very small divisions). The graduation and completion rates showed the sharpest decline of roughly 5 percent for the "large" divisions in 2003-04, resulting in graduation and completion rates that were the lowest among the five division size classifications (approximately 73% and 70% respectively). Even though the "very large" divisions (Chesterfield, Fairfax, Prince William, and Virginia Beach) experienced declines in 2003-04, they still maintained the highest graduation rate, while all other divisions were below the state average.

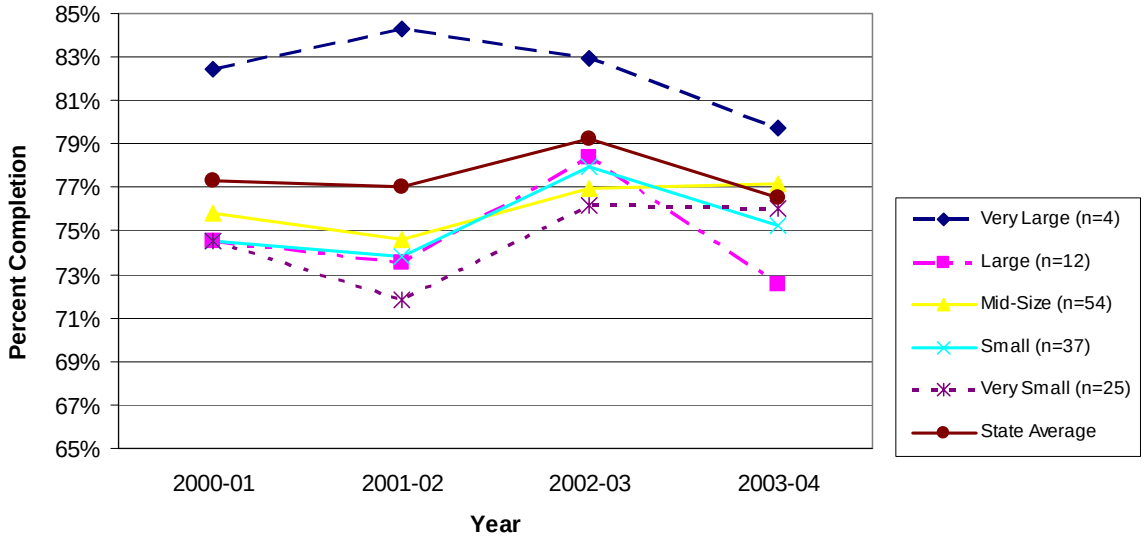
According the results shown in Figures 17 and 18, graduation and ninth grade completion rate trends are most problematic for the "very large" and "large" divisions as evidenced by the steady decline, of roughly 5 percent, since 2000-01 for the "very large" divisions and the sharper decrease of 5 percent among "large" divisions, since 2002-03. One factor that may account for the varied patterns in graduation and ninth grade completion rates among the different sized divisions includes changes in enrollment resulting from student migration during 2001-2004.

Figure 17. 2001-2004 On-Time Diploma Graduation Rate by Division Size[1,2]



1. Division size based on 2000-01 total enrollment: Very Large=greater than 41,656; Large=13,871 -41,655; Mid-Size=3,399-13,870; Small=1, 721to 3,398; Very Small=less than 1,721
2. Graduation Rate: ((Advanced + Standard + Modified Standard + Special)/ 9th grade enrollment for graduating class) *100)

Figure 18. 2001-2004 Percent of Ninth Grade Completion Rate by Division Size[1,2]



1. Division size based on 2000-01 total enrollment: Very Large=greater than 41,656; Large=13,871-41,655; Mid-Size=3,399to 13,870; Small=1, 721to 3,398; Very Small=less than 1,721
2. Percent of 9th Grade Completing: ((Total completers / 9th grade enrollment for graduating class)*100)

2001-2004 On-Time Diploma Graduation and Completion Rates by Region (Superintendents' Study Groups)

The data provided by the Virginia Department of Education were also disaggregated by geographic region, as defined by the Superintendents' Study Groups. Figure 19 and Table 6 present the diploma graduation rates by region for 2001-2004. Results indicate that school divisions in Region 4 (Northern Virginia) have consistently maintained the highest diploma graduation rate since 2000-01 – a rate of 86 percent for each year during 2000-2003, followed by a decline in 2003-04 to 80 percent. Over the past four years the diploma graduation rate has remained relatively stable in Regions 2, 5, 6, 7, and 8. Slight to moderate increases have occurred in Regions 1 (72.4% to 75.2%) and 3 (74.5% to 79.1%) during 2001-2004. With the exception of Regions 4 and 6, the highest diploma graduation rates of the last four years were achieved in 2002-03, which was then followed by a slight decrease in 2003-04.

Figure 19. 2001-2004 On-Time Diploma Graduation Rate by Region (Superintendents Study Groups)

Table 6. 2001-2004 Diploma Graduation Rate by Region[1]

Region	2000-01 %	2001-02 %	2002-03 %	2003-04 %
1	72.4	73.0	78.3	75.1
2	66.2	64.5	67.8	65.4
3	74.5	72.7	79.5	79.1
4	85.9	86.5	85.9	80.2
5	74.3	73.0	76.4	72.8
6	71.0	69.0	70.2	71.2
7	75.4	74.3	75.1	73.8
8	67.9	68.6	68.9	66.6
State Average	74.7	74.0	76.4	73.5

1. The geographic area represented by each of the regions is as follows: Region 1 – Richmond area; Region 2 – Tidewater or Southeast VA; Region 3 – Fredericksburg area and the Northern Neck; Region 4 – Northern VA; Region 5 – Central VA; Region 6 – Southern VA; Region 7 – Southwest VA; Region 8 – Southside VA.

The ninth grade completion rate for 2001-2004 by region is shown in Figure 20 and in Table 7. The patterns illustrated are similar to those of the diploma graduation rate. Region 4 consistently maintained the highest completion rate during 2001-2003 (average of 88% approximately) which was followed by a decrease in 2003-04 (82.5%) and was at this time similar to Region 3 (82.7%). Again, relative to the diploma graduation rates, the ninth grade completion rates are slightly higher due to the greater

number of students included in the numerator – all completers compared to students earning one of the four diploma types. With the exception of Regions 4 and 6, the highest rates of ninth grade completion for 2001-2004 occurred in 2002-03; rates either remained fairly similar or decreased slightly (1-3% on average) the subsequent year.

Figure 20. 2001-2004 On-Time Ninth Grade Completion Rate by Region (Superintendents' Study Groups)

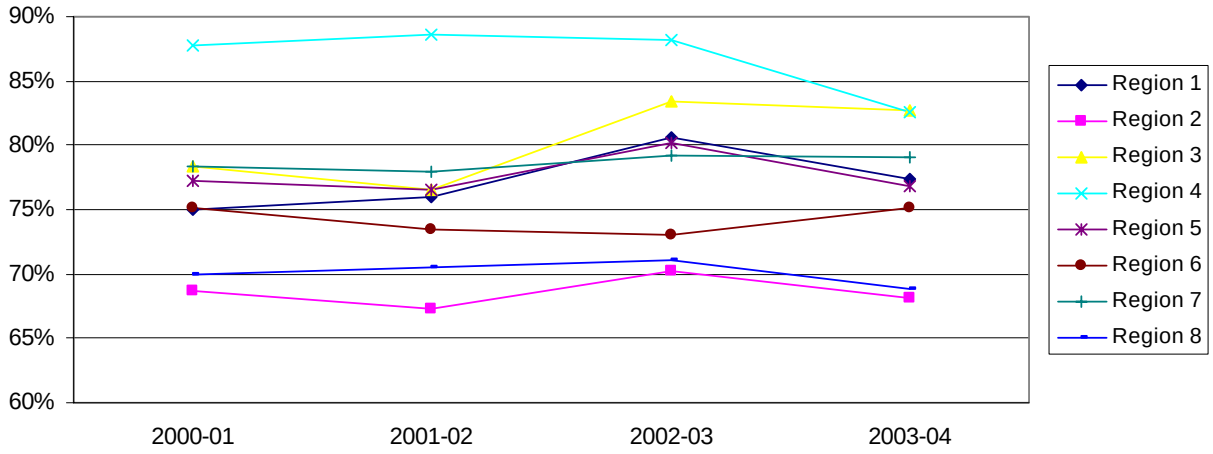


Table 7. 2001-2004 Ninth Grade Completion Rate by Region[1]

Region	2000-01 %	2001-02 %	2002-03 %	2003-04 %
1	75.0	75.9	80.6	77.4
2	68.6	67.2	70.2	68.2
3	78.4	76.5	83.5	82.7
4	87.8	88.6	88.1	82.5
5	77.2	76.5	80.2	76.8
6	75.2	73.5	73.1	75.2
7	78.3	77.9	79.2	79.1
8	69.9	70.6	71.1	68.9
State Average	77.3	77.0	79.2	76.5

1. The geographic area represented by each of the regions is as follows: Region 1 – Richmond area; Region 2 – Tidewater or Southeast VA; Region 3 – Fredericksburg area and the Northern Neck; Region 4 – Northern VA; Region 5 – Central VA; Region 6 – Southern VA; Region 7 – Southwest VA; Region 8 – Southside VA.

Factors that Influence Graduation Rate Trends

As required in No Child Left Behind (NCLB), graduation rates should provide a measure of student success over the course of a traditional high school experience, and in doing so communicate the percent of students who earned a regular diploma during the standard four years. To appropriately interpret both NCLB and the on-time graduation rate used in this study it is important to consider four factors that may influence the graduation rate estimates: (1) students moving out of the state, (2) students enrolling in private school, (3) students leaving the public setting to be home-schooled, (4) students dropping out of high school, and (5) students being retained in grade.

The extent to which student enrollment changes, as a particular cohort moves through high school, may affect the graduation rate. If a significant number of students transfer into a school division or state during the four year period, graduation rates may overestimate the rate at which students successfully complete high school. Conversely, high rates of out-migration may in fact underestimate graduation rates. A special tabulation by the U.S. Census Bureau for Census 2000 provides gross and net migration patterns for the US and each state from 1995-2000, disaggregated by five-year age spans. The Census data indicate that the net migration (in-migration – out-migration) for children between the ages of 10-14, between 1995 and 2000 is roughly 4.1 percent in Virginia. This range includes the age at which ninth graders in the classes of 2001-2004 would have enrolled in high school and can be used to approximate the degree to which student migration would influence graduation rates. The 4.1 percent net-migration estimate, when considered over the five-year time internal indicates that on average the 10-14-year-old population increased by less than 1 percent per year (Haney, Madaus, Abrams, Wheelock, Miao & Gruia, 2004).

Another way to estimate the influence increases or decreases in student enrollment may have on graduation rates is to examine year-to-year changes in the total school enrollment. According to the 2000-2004 fall membership counts the total number of students enrolled in Virginia's public schools increased by 5.2 percent – from 1,144, 913 in 2000 to 1,204,808 in 2004 (Virginia Department of Education). This 5.2 percent change indicates that on average the total school enrollment has increased by 1 percent during each of the last five years. Taken together, the 4.1 percent net in-migration for

1995-2000 and the 5.2 percent increase in public school enrollment for 2000-2004 suggest that more high-school aged students have entered the public school system in Virginia. Thus, these increases in student enrollment suggests that the on-time graduation and completion rates (see Figure 14) may in fact slightly overestimate the rate at which students have completed high school for the graduating classes of 2001-2004. Of course, division-level changes in enrollment may be much higher than what is reported by the state as a whole.

Decreases in student enrollment may also affect graduation rate estimates. Since it has already been determined that decreases in enrollment cannot be attributable to students moving out of the state or to "out-migration," other reasons for students leaving the public school system should be considered. Students may choose to leave high school to enroll in a private school or to be schooled at home. The Digest of Education Statistics (Snyder & Hoffman, 2002), an annual report of the National Center for Education Statistics (NCES) provides the number of students in grades 9-12, enrolled in public and private school for the last three decades. According to these data, over 90 percent of all students in grades 9-12 have been enrolled in public schools. Private school enrollment has remained stable over the last thirty years and has accounted for roughly 10 percent of the total enrollment in the 1980s and 9 percent in the last decade. These trends suggest that private school enrollment has had a consistent impact on Virginia graduation rates since at least the 1980s; as a result it is unlikely that any increases or decreases in graduation rate trends are attributable to greater numbers of students leaving high school to enroll in private schools (see Haney et al., 2004, for a discussion of national and state enrollment patterns for 1970-2000).

An alternative to enrolling in private school is being schooled at home, commonly referred to as the practice of home-schooling. Since 2002, the Virginia Department of Education has made available the number of elementary (K-5), middle (6-8) and high school (9-12) students that are home-schooled. Over the last three years, the percent of elementary students schooled at home has been twice that of middle and high school aged students. The number of students in grades 9-12 that are home-schooled has increased from 3,506 in 2002-03 to 4,001 in 2004-05. As a percentage of total enrollment in grades 9-12, home-schooling accounts for 1 percent. The pattern of private school enrollment,

coupled with the small percentage of the high school-aged students who are home-schooled, suggests that the average graduation rate of 75 percent for 2001-2004 cannot be explained by greater numbers of students choosing to leave the public school system for an alternative educational setting.

Besides leaving public school to continue education in a private school or at home, students may choose to leave school altogether. Since 1996, the Virginia Department of Education has made annual dropout figures for grades 7-12 publicly available; the most recent dropout numbers are available through the 2003-04 academic year. Virginia uses the federal (NCES) definition of a dropout[2] which is an individual who:

1) was enrolled in school at some time during the previous school year and was not enrolled on October 1 of the current school year;

2) was not enrolled on October 1 of the previous school year although expected to be in membership; and has not graduated from high school or completed a state – or district- approved education program; and does not meet any of the following exclusionary conditions:
    a. transfer to another public school district, private school, or state- or district-approved educational program;
    b. temporary school-recognized absence due to suspension or illness;
    c. death.

Since the 1999-2000 school year, the average yearly dropout rate in Virginia has been stable at roughly 2 percent, for students in grades 7-12. This rate is calculated by dividing the number of dropouts in a given year by the September 30th membership of that school year.[3] This method of calculation provides a yearly average but does not provide a measure of the dropout rate for a given cohort or class of students. To better understand the relationship between the dropout and graduation rates, the dropout rate as a percentage of ninth grade enrollment for the classes of 2001-2004 was calculated.

The Virginia Department of Education provided the number of students who dropped out from grades 9-12 for the 1996-97 through the 2003-04 academic years. As a result, it was possible to determine the total number and percent of students who dropped

[2] For the definition of a dropout and additional dropout guidelines see http://www.pen.k12.va.us/VADOE/Publications/NCLB/new_data-definitions.html

[3] http://www.pen.k12.va.us/VADOE/Publications/NCLB/new_data-definitions.html

out for each graduating class. These results are shown in Table 8. As shown, the percent of dropouts has decreased slightly each year since 2001, from 14.2 percent to 10.3 percent. For the class of 2004, the dropout rate indicates that 10.3 percent of the original freshman class or 10,114 students enrolled in ninth grade in 2001 dropped out of high school by their senior year. When the high school dropout rate is considered in this way, as a cumulative estimate, it helps to explain the 75 percent average on-time graduation rate for 2001-2004.

Table 8. Dropout Rate as a Percent of Grade 9 Enrollment

Graduating Class	Grade 9 Dropouts	Grade 10 Dropouts	Grade 11 Dropouts	Grade 12 Dropouts	Total # of Dropouts	Dropouts as a % of grade 9 enrollment
2001	4,227	3,170	2,419	2,747	12,563	14.2%
2002	4,080	2,685	2,533	2,412	11,710	13.0%
2003	3,164	2,888	2,105	2,473	10,630	11.2%
2004	3,247	2,304	2,212	2,351	10,114	10.3%

Source: Virginia Department of Education

It is important to recognize that this approach to calculating the dropout rate adheres to principles established in NCLB with regard to basing indices of student progress on the standard number of years required to complete high school. Other research that examined the dropout issue has used similar strategies to calculate dropout rates and has yielded comparable results (Barton, 2005; Joint Legislative Audit and Review Commission, 2004).

According to the diploma graduation rates for the classes of 2001-2004 on average, 25 percent of students enrolled in the ninth grade did not graduate four years later. In addition to the dropout rate, grade retention, particularly in grade 9, may also help to explain the graduation rate. The Virginia Department of Education makes available the number of students promoted and retained in grade by grade-level for 1996-2003 in the Superintendent's Annual Report; data for the 2003-04 school year were provided by the Department upon request. The data on retention was used to calculate the percent of students retained in grade for this nine year time span. Table 9 shows the numbers of students enrolled in Virginia public schools from kindergarten to grade 12 for

1996-97 through 2003-04. Table 10 shows the percent of students retained by grade level.

As shown in Table 10, the rate of retention is fairly low for the elementary grades, especially for grades 2 through 5. Once students reached the sixth grade the rate of retention increased to about 4 percent and has ranged from roughly 5 to 8 percent for grades 7 and 8 from 1997 to 2004. The rate of grade retention is the highest in grade 9 at 13 percent on average for the last several years. This rate is roughly twice that of the percent of students held back in grades 8 and 10, suggesting that grade 9 is a key transition point in high school.

When the impact of grade retention is considered over the standard four years of high school it is possible to estimate the cumulative effect. For the class of 2003 for example, the number of students retained in grade 9 in 1999-00 was 12,497; in grade 10 (2000-01) 6,516 students were held back, in grade 11 the following year (2001-02) 4, 143 were retained and in twelfth grade (2002-03) 4,817 students were kept back. Across the four years a total of 27,973 students were retained, or 29.4 percent of those enrolled in grade 9 in 1999-00. This index may slightly overestimate the four-year cumulative retention rate because of confounding with student retentions of other cohorts and dropping out; however it does provide a rough estimate of the influence of grade retention on the graduation rate. These results suggest that grade retention may account for a significant portion of the 25 percent of students who did not graduate with their class in 2001, 2002, 2003 or 2004. The rate of grade retention, particularly in the ninth grade, is concerning since research has consistently shown that retaining students in grade yields little to no academic advantage and in fact increases the likelihood that students will drop out of high school, especially if retained more than once (Jimerson, 2001; Nagaoka & Roderick, 2004; Shepard & Smith, 1989). Further study to determine why ninth grade students are retained in grade at a higher rate compared to those at other grade levels will inform the interpretation of the graduation rate.

Table 9. Virginia Public School Enrollment, Kindergarten to Grade 12, 1996-97 to 2003-04

Grade/Year	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04
K	86,542	85,729	84,154	83,938	82,585	82,489	83,220	85,884
1st grade	91,234	90,271	89,967	88,996	89,072	87,841	87,503	87,686
2nd grade	87,710	89,801	89,326	89,819	89,287	88,692	87,984	87,445
3rd grade	83,443	87,396	89,857	90,494	91,217	90,480	89,707	88,883
4th grade	82,571	83,447	87,278	90,781	92,073	91,966	91,178	90,738
5th grade	82,768	82,557	83,074	87,933	92,300	92,693	92,388	91,898
6th grade	85,407	84,696	84,594	86,303	91,743	94,724	95,451	95,166
7th grade	82,668	85,913	84,975	85,872	88,338	92,725	95,782	96,674
8th grade	80,842	82,753	85,348	85,092	87,455	88,184	92,556	95,599
9th grade	88,721	88,374	90,241	95,017	98,371	100,599	101,752	107,046
10th grade	77,806	78,960	79,387	80,490	86,395	86,814	88,738	90,022
11th grade	68,649	69,767	71,212	71,917	74,045	78,877	78,914	81,395
12th grade	64,497	66,430	67,787	69,333	70,337	70,610	75,821	76,551

Source: Virginia Department of Education, September 30 Fall Membership Reports (http://www.pen.k12.va.us/VDOE/Publications/rep_page.htm)

Table 10. Percent of Grade-Level Total Enrollment Retained in Grade for 1996-97 to 2002-03

Grade/Year	96-97	97-98	98-99	99-00	00-01	01-02	02-03	03-04[1]
K	4.32%	4.44%	4.80%	4.91%	4.69%	4.77%	4.16%	5.05%
1st grade	4.51%	4.87%	5.09%	4.71%	4.71%	4.50%	4.18%	3.83%
2nd grade	2.57%	3.06%	3.28%	2.96%	2.79%	2.66%	3.11%	2.08%
3rd grade	1.96%	2.47%	2.65%	2.26%	2.13%	2.03%	2.05%	1.51%
4th grade	1.61%	1.91%	2.08%	1.71%	1.64%	1.43%	1.73%	1.07%
5th grade	0.97%	1.24%	1.30%	1.16%	1.13%	1.02%	2.70%	0.64%
6th grade	3.90%	4.74%	5.33%	4.89%	4.62%	4.32%	4.76%	3.85%
7th grade	5.77%	6.38%	6.35%	6.31%	5.96%	6.05%	6.03%	5.27%
8th grade	6.22%	6.84%	6.91%	6.17%	6.05%	5.30%	8.76%	4.98%
9th grade	12.19%	13.05%	13.66%	13.15%	13.70%	13.16%	13.47%	11.85%
10th grade	7.69%	7.89%	8.07%	7.79%	7.54%	7.92%	7.13%	6.54%
11th grade	5.60%	5.45%	5.40%	5.40%	5.44%	5.25%	5.08%	5.19%
12th grade	5.74%	6.58%	6.51%	6.18%	6.53%	5.98%	6.35%	6.36%

Source: Virginia Department of Education, Superintendents Annual Report, Table 7 – Enrollment: Age/Grade Distribution for All Original Pupils and End-of-Year Membership: Number of Pupils Promoted and Retained by Grade (http://www.pen.k12.va.us/VDOE/Publications/rep_page.htm)

1. These data are based on a draft version of Table 7 in the 2004 Superintendents Annual Report.

The average on-time diploma graduation rate since 2000-01 has been 75 percent, indicating that 25 percent or one in every four ninth graders did not graduate after four years of high school. Possible explanations have been explored such as changes in enrollment caused by student migration, students leaving school to enroll in private

school or be schooled at home, and dropping out of high school altogether. Dropouts and grade retention may account for a substantial portion of the 25 percent who did not graduate on time. To explore this issue at the division level, an open-ended survey item asked “In your opinion, what factors contribute to division-by-division differences in the ratio of 2004 graduates to 2000-01 ninth grade enrollment?” As shown in Table 11, 34 (27 percent) of the participating divisions did not respond. Similar numbers of divisions indicated that changing division enrollment, particularly a decline, accounted for differences. Increases in the number of students earning alternative certificates of completion, in addition to increases in grade retention and subsequently taking more than four years to graduate, were reported by 21 divisions. The next most frequent response, according to 13 divisions, was an increase in the number of dropouts. Less than 10 divisions indicated that a broad range of issues including for example the economy, failure to meet course credits/SOL requirements, parental involvement, teacher preparedness and student ability accounted for disparities across the school divisions with regard to the percent of ninth graders in 2000-01 who graduated in 2004. The division responses are interesting in light of the state-level trends with regard to changes in student enrollment in particular and substantiate the impact of grade retention and drop out rates. The division-level responses suggest that closer examination of changing student enrollment patterns at the division level is warranted.

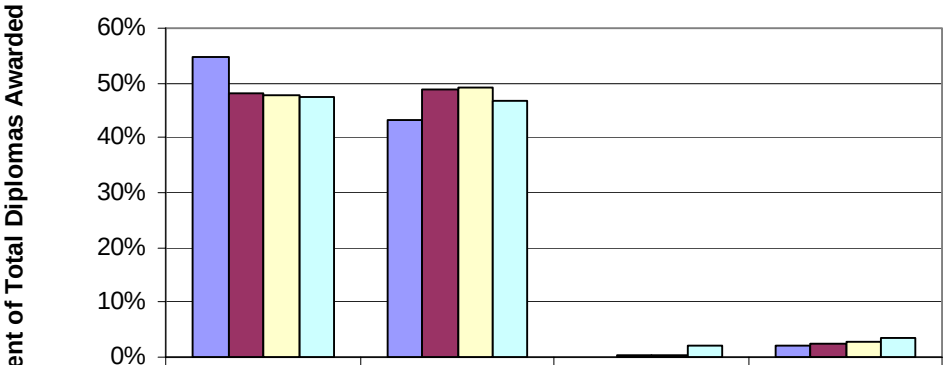
Table 11. Reasons Indicated for Division-by-Division Differences in Graduation Rates

Reason	Number of Divisions
No opinion	34
Transfers out of school division/decline in enrollment	34
Mobility/transiency (positive relationship with graduation rate)	28
Alternative programs enrollment (GED, Modified Diploma, ISAEP)	22
Taking more than 4 years to graduate/retention	21
Dropouts	13
Early graduation	7
Lack of job opportunities/economy	6
Failure to earn course credit/SOL requirements	5
Community socioeconomic status	4
Private and home-school returnees	3
Parental education on accountability/involvement	3
Support services	3
Growth of community	3
Teacher preparedness	3
Student ability	1
Compulsory attendance release	1
Summer graduation	1
Class size	1
Curriculum access	1
Reporting procedures	1
Home availability	1

Rates at which Students Earned Advanced, Standard, Modified Standard, and Special Diplomas for 2001-2004

Figure 21 shows what percent of diploma-earning students obtained an advanced, standard, modified standard or special diploma for the last four academic years. As illustrated, the vast majority of students awarded a diploma earned either an advanced or standard diploma. In 2000-01 the percent of students who earned an advanced diploma was roughly 10 percent greater than those who received a standard diploma – 54.6 percent compared to 43.3 percent. Since 2000-01, the percent of students who have received advanced diplomas has decreased to roughly equal the percent of those who earned standard diplomas. This decrease may be explained in part by policy changes that increased in the number of standard units of credits required for the advanced diploma beginning in 2001-02, and the implementation of verified credit requirements for the class of 2004. Since the introduction of the modified standard diploma in 2000-01, the percentage of students earning this type of diploma has substantially increased over the past four years from .1 percent (37 students) in 2000-01 to 2 percent (1,437 students) in 2003-04. Also, the percent of students receiving special diplomas has almost doubled since 2000-01 (2% to 3.6%); although the percentages are small, the number of students has increased from 1,322 to 2,630. By comparison, the percent of total completers that have earned GEDs or certificates of completion has remained stable during 2001-2004. Less than 1 percent of total completers have received certificates of completion and roughly 1.3 percent earned GEDs during the each of the last four years. These results, coupled with the change in the percent of students earning standard, modified standard, and special diplomas, especially in 2003-04, suggest that a greater percentage of students are graduating with a modified standard or special diploma instead of a standard diploma.

Figure 21. 2001-2004 Percent of Students Awarded Advanced, Standard, Modified Standard, and Special Diplomas[1,2]



	Advanced	Standard	Modified	Special
2000-01	54.6%	43.3%	0.1%	2.0%
2001-02	48.1%	49.0%	0.3%	2.6%
2002-03	47.7%	49.1%	0.5%	2.7%
2003-04	47.5%	46.9%	2.0%	3.6%

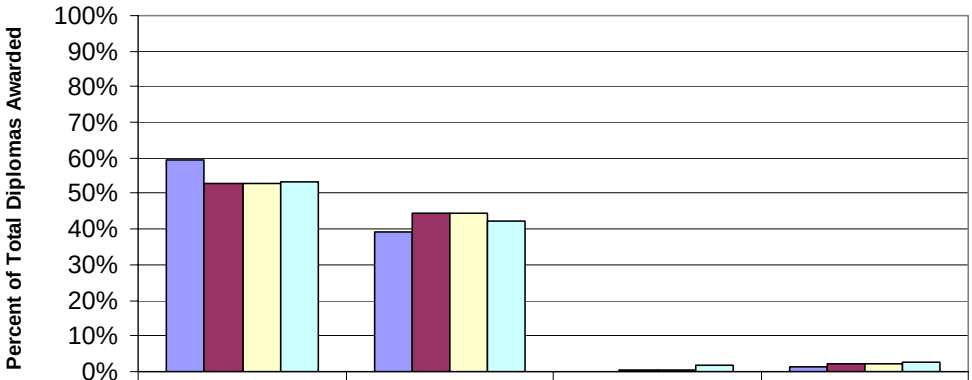
1. Diploma totals have been adjusted to exclude diplomas earned by students enrolled in the Department of Correctional Education.
2. The number of total diplomas was calculated by summing the number of advanced, standard, modified standard and special diplomas awarded.

Rates at which Students Earned Advanced, Standard, Modified Standard, and Special Diplomas for 2001-2004 by Race/Ethnicity

Figure 22 shows the percent of diploma earning White students who obtained an advanced, standard, modified standard or special diploma. The trends for White students are fairly similar to those at the state level presented in Figure 21 for all students. In 2000-01, 20 percent more students earned an advanced rather than a standard diploma (59.3% and 39.1% respectively). By 2003-04, only 10 percent more White students are earning advanced compared to standard diplomas. It is important to note that at the state level the percent of students earning advanced and standard diplomas has been fairly similar since 2001-02; however, when disaggregated by race, the percent of White students earning advanced diplomas has consistently exceeded the percent who obtained standard diplomas. Further, the percent of White students earning advanced diplomas has exceeded that of the state average for 2001-2004. Similar to state-level trends, the percentage of White students earning modified standard and special diplomas has increased, although the percentages are small. Again, similar to state-level patterns, the percent of white total completers earning GEDs and certificates of completion have

remained small and stable for 2001-2004 at less than 1.5 percent and 1 percent, respectively.

Figure 22. Percent of White Students Earning Advanced, Standard, Modified Standard, and Special Diplomas for 2001-2004[1]



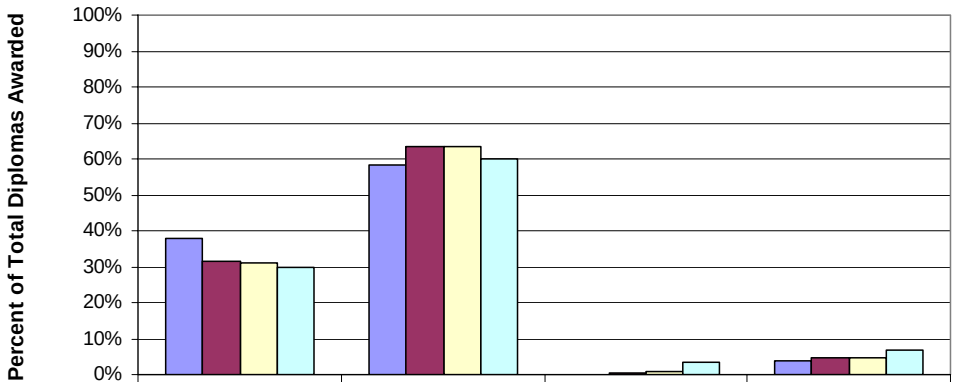
	Advanced	Standard	Modified	Special
2000-01	59.3%	39.1%	0.0%	1.5%
2001-02	53.1%	44.6%	0.3%	2.1%
2002-03	52.8%	44.6%	0.4%	2.2%
2003-04	53.3%	42.3%	1.6%	2.8%

1. The number of total diplomas was calculated by summing the number of advanced, standard, modified standard, and special diplomas awarded.

While the diploma earning patterns for White students were fairly similar to that at the state-level, the rates at which Black students have earned advanced, standard, modified standard, and special diplomas (Figure 23) are strikingly different from that of their White counterparts and the state at large. Both the state average and the percent of White students earning advanced diplomas since 2001 has far exceeded that of Black students, by as much as 15-20 percent over the last four years. The percent of Black students earning advanced diplomas has decreased over the last four years from 37.9 percent in 2000-01 to 29.8 percent in 2003-04. By comparison, the percent earning standard diplomas has remained fairly stable at roughly 60 percent during this same time interval. Similar to state-level patterns and those of White student populations, the percent of Black students earning modified standard and standard diplomas has also increased. The percent earning modified standard diplomas has increased, from .1 percent (14 students) in 2000-01 to 3.3 percent (559 students) in 2003-04. Like the percent of students earning special diplomas statewide, the percent of Black students has roughly doubled during the past four years from 3.8 percent to 6.8 percent. During 2001-

2004, the percent of Black total completers earning GEDs (1%) and certificates of completion (1.6%) has remained stable.

Figure 23. Percent of Black Students Earning Advanced, Standard, Modified Standard, and Special Diplomas for 2001-2004[1]



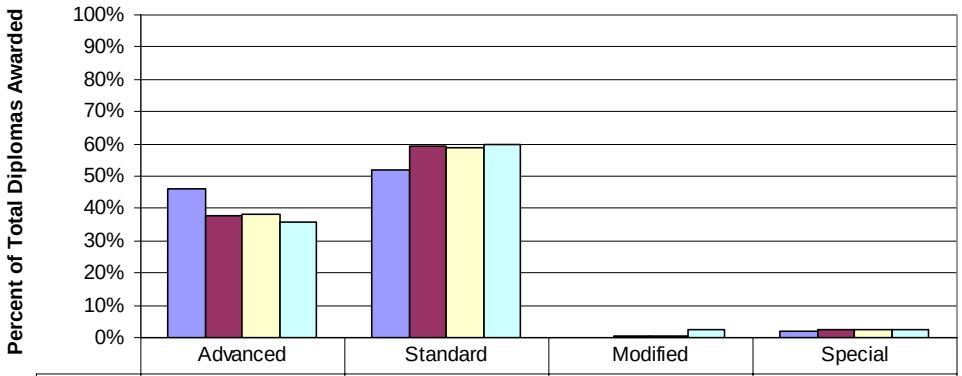
	Advanced	Standard	Modified	Special
2000-01	37.9%	58.2%	0.1%	3.8%
2001-02	31.4%	63.5%	0.5%	4.6%
2002-03	31.1%	63.4%	0.8%	4.7%
2003-04	29.8%	60.1%	3.3%	6.8%

1. The number of total diplomas was calculated by summing the number of advanced, standard, modified standard, and special diplomas awarded.

Figure 24 shows the extent to which Hispanic diploma earning students obtained advanced, standard, modified standard, and special diplomas. Compared to the state average and their White counterparts, Hispanic students were less likely to earn advanced diplomas. However, the rates at which Hispanic students obtained advanced high school diplomas exceeded that of Black students by roughly 6-10 percent for 2001-2004. Similar to their Black counterparts, the percent of Hispanic students earning standard diplomas has increased over the last four years. The percent of Hispanic students earning modified standard diplomas has increased at rates consistent with those at the state level and for White and Black student populations. However, the percent of Hispanic students earning special diplomas has increased slightly, but not to the same degree as that at the state level. The percent of Hispanic total completers earning a GED or certificate of completion has also remained stable during 2001-2004 – less than 1 percent earned GEDs and roughly 1 percent obtained certificates of completion. Comparing Figures 22, 23, and 24, it is clear that most of the state-level decline in graduation and completion rates is accounted for by Black students. For these students, substantial declines in earning

standard diplomas are explained by increases in their receipt of modified standard and special diplomas.

Figure 24. Percent of Hispanic Students Earning Advanced, Standard, Modified Standard, and Special Diplomas for 2001-2004[1]



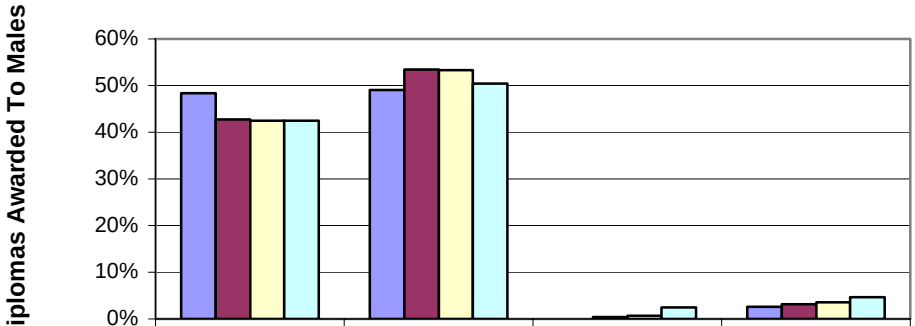
	Advanced	Standard	Modified	Special
2000-01	46.0%	51.9%	0.0%	2.0%
2001-02	37.9%	59.2%	0.7%	2.3%
2002-03	38.3%	58.9%	0.6%	2.3%
2003-04	35.6%	59.6%	2.5%	2.4%

1. The number of total diplomas was calculated by summing the number of advanced, standard, modified standard, and special diplomas awarded.

Rates at which Students Earned Advanced, Standard, Modified Standard, and Special Diplomas for 2001-2004 by Gender

The diploma earning patterns of males mirror those at the state-level for 2001-2004, particularly regarding the modified standard and special diploma trends. As indicated in Figure 25, the percent of male graduates that obtained an advanced diploma has decreased since 2000-01 and is consistently below statewide levels by roughly 5 percent on average. The percentage of males earning standard diplomas has remained fairly stable at roughly 50 percent, with the exception of a slight increase to 53 percent in 2002-03. The percent of diploma earning males who received modified standard and special diplomas has increased and exceeds that of the state average (2% and 3.6% respectively; see Figure 21). Again, the percent of male total completers earning GEDs and Certificates of Completion has remained fairly constant during the last four years at roughly 1.4 percent and 1 percent, respectively.

Figure 25. Percent of Male Students Earning Advanced, Standard, Modified Standard, and Special Diplomas for 2001-2004[1]

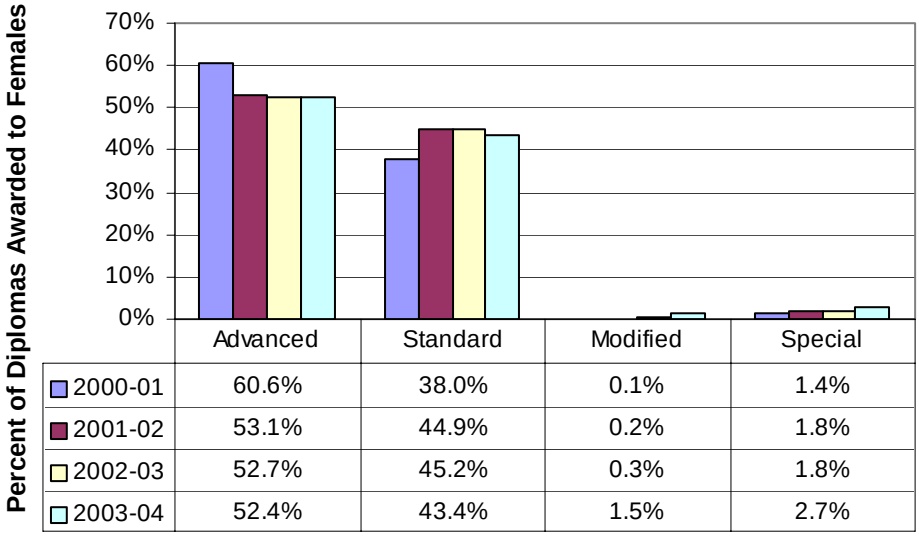


	Advanced	Standard	Modified	Special
2000-01	48.3%	49.0%	0.1%	2.7%
2001-02	42.7%	53.4%	0.4%	3.1%
2002-03	42.5%	53.2%	0.7%	3.6%
2003-04	42.4%	50.4%	2.5%	4.7%

1. The number of total diplomas was calculated by summing the number of advanced, standard, modified standard, and special diplomas awarded.

Compared to their male counterparts, larger percentages of females graduated with an advanced diploma (see Figure 26). Similar to state level trends, the percent of females earning advanced diplomas has decreased by roughly 10 percent during the last four years, from 60.6% in 2000-01 to 52.4% in 2003-04. Not surprisingly, the percent of females earning standard diplomas has increased over the last four years (38% to 43.4%). Similarly, the percent of female diploma earning students that obtained a modified standard or special diploma also increased during 2001-2004, although the levels are below that of the state average. The percent of female total completers earning a GED or Certificate of Completion has remained unchanged during the last four years at less than 1 percent. Results suggest that diploma earning male students are more likely to obtain a modified standard or special diploma than their female counterparts.

Figure 26. Percent of Female Students Earning Advanced, Standard, Modified Standard, and Special Diplomas for 2001-2004[1]



	Advanced	Standard	Modified	Special
2000-01	60.6%	38.0%	0.1%	1.4%
2001-02	53.1%	44.9%	0.2%	1.8%
2002-03	52.7%	45.2%	0.3%	1.8%
2003-04	52.4%	43.4%	1.5%	2.7%

1. The number of total diplomas was calculated by summing the number of advanced, standard, modified standard, and special diplomas awarded.

Rates at which Students Earned Advanced, Standard, Modified Standard, and Special Diplomas for 2001-2004 by Division Size

The percent of diploma earning students that obtained an advanced, standard, modified standard, or special diploma was calculated according to the size of the division, ranging from very small divisions of less than 1,721 students enrolled to very large divisions with student enrollments in excess of 41,656 for the 2000-01 school year. The diploma earning patterns illustrated below are consistent with those at the state level. Regardless of the size of division, the percent of students earning advanced diplomas has decreased while the percent earning standard, modified standard, and special diplomas has increased over the last four academic years. Diploma earning students in “large” and “very large” divisions have consistently earned advanced diplomas at higher percentages than those in “very small,” “small,” and “mid-sized” divisions. By comparison the percent of students earning special diplomas is greater in the “very small” to “mid-sized” divisions compared to the “large” and “very large” divisions, although the rate of increase is fairly consistent regardless of division size. The results for the “small” divisions are

most consistent with those at the state-level, while the four "very large" divisions had a substantially higher percentage of students graduate with an advanced diploma, along with smaller percentages of students receiving modified standard or special diplomas.

Table 12. 2001-2004 Percent of Students Awarded Advanced, Standard, Modified Standard, and Special Diplomas by Division Size

Division Size	School Year	Type of Diploma				
		Advanced %	Standard %	Modified %	Special %	Total # of Diplomas
Very Small (n=25)	2000-01	45.4	49.9	0.0	4.7	1587
	2001-02	40.3	55.8	0.4	3.4	1612
	2002-03	43.0	53.6	0.2	3.2	1648
	2003-04	39.2	52.0	3.2	5.6	1708
Small (n=37)	2000-01	47.8	49.7	0.0	2.5	5449
	2001-02	41.3	54.5	0.7	3.5	5360
	2002-03	42.6	53.2	0.8	3.5	5852
	2003-04	46.1	46.6	2.9	4.4	5637
Mid-Size(n=54)	2000-01	49.6	47.5	0.0	2.8	21066
	2001-02	44.3	51.5	0.3	3.9	21209
	2002-03	42.0	53.9	0.4	3.7	23148
	2003-04	42.9	50.1	2.0	5.0	22884
Large (n=12)	2000-01	53.6	44.9	0.2	1.4	16774
	2001-02	48.0	50.0	0.4	1.6	16916
	2002-03	46.5	50.7	0.6	2.2	19278
	2003-04	46.9	47.7	2.4	3.0	19202
Very Large (n=4)	2000-01	62.8	35.8	0.0	1.3	21152
	2001-02	54.4	43.7	0.2	1.7	21393
	2002-03	56.4	41.5	0.4	1.8	22452
	2003-04	53.7	42.5	1.3	2.4	22637

1. Division size based on 2000-01 total enrollment: Very Large=greater than 41,656; Large=13,871-41,655; Mid-Size=3,399to 13,870; Small=1, 721to 3,398; Very Small=less than 1,721

Rates at which Students Earned Advanced, Standard, Modified Standard and Special Diplomas for 2001-2004 by Region

Table 13 shows the percent of diploma earning students who obtained an advanced, standard, modified standard, or special diploma by region. Results disaggregated by region are similar to those described previously. Across each region, the percent of students who earned advanced diplomas has decreased, while the percent who obtained standard, modified standard, and special diplomas has increased for 2001-2004. Region 4 has consistently maintained the highest percent of students earning advanced and the lowest percent earning modified standard and special diplomas. Region 7 has the lowest percent of students earning advanced diplomas, while Region 8 has the highest percent of students earning modified standard and special diplomas. Regions 1 and 3 show results that are most consistent with those at the state level.

Table 13. 2001-2004 Percent of Students Awarded Advanced, Standard, Modified Standard, and Special Diplomas by Region

Region	School Year	Type of Diploma				
		Advanced %	Standard %	Modified %	Special %	Total # of Diplomas
1	2000-01	55.1	43.0	0.2	1.7	9349
	2001-02	47.1	49.9	0.2	2.8	9633
	2002-03	47.6	48.3	0.8	3.3	10385
	2003-04	46.0	47.8	1.9	4.2	10635
2	2000-01	52.7	45.3	0.0	2.0	14748
	2001-02	46.9	50.7	0.3	2.2	14643
	2002-03	44.1	52.8	0.3	2.8	16243
	2003-04	44.4	50.4	1.6	3.5	16216
3	2000-01	52.4	45.6	0.1	1.9	4120
	2001-02	49.0	47.8	0.7	2.5	4335
	2002-03	45.3	52.5	0.5	1.8	4949
	2003-04	46.3	48.3	2.3	3.0	5082
4	2000-01	61.2	37.3	0.1	1.5	20246
	2001-02	53.8	44.1	0.4	1.7	20552
	2002-03	54.6	43.2	0.6	1.6	22136
	2003-04	53.6	42.3	1.9	2.2	22011
5	2000-01	56.2	40.7	0.0	3.1	5931
	2001-02	48.9	46.9	0.4	3.8	5969
	2002-03	49.3	46.1	0.7	4.0	6478
	2003-04	51.2	42.4	1.6	4.8	6280
6	2000-01	48.9	48.3	0.0	2.8	5184
	2001-02	44.6	51.5	0.5	3.5	5190
	2002-03	43.0	52.4	0.5	4.1	5596
	2003-04	43.1	49.6	2.3	5.1	5563
7	2000-01	41.8	56.3	0.0	2.0	4498
	2001-02	34.5	62.0	0.2	3.4	4305
	2002-03	36.3	60.5	0.2	3.0	4545
	2003-04	36.8	55.2	2.9	5.1	4311
8	2000-01	43.0	52.9	0.0	4.0	1952
	2001-02	36.8	57.0	0.0	6.2	1863
	2002-03	41.1	54.8	0.0	4.1	2046
	2003-04	40.2	47.8	4.3	7.7	1970

Findings: Remedial Initiatives - *Project Graduation, ePat, WorkKeys, and Term Graduation Testing*

This section of the report summarizes data concerning the use of several remedial instructional activities that helped students earn verified units of credit required to receive a high school diploma. Project Graduation consists of two types of initiatives: Spring Regional Academies and Summer Continuation Regional Academies and on-line tutorials that focused on English/Reading and Algebra I. The survey questions concerning Project Graduation were designed to assess student access to each of the initiatives, enrollment in the initiatives, and success of participating students on subsequent SOL tests. Participation in WorkKeys and Term Graduating testing was also explored. The WorkKeys Writing Assessment targets the English/Writing test and is a recently approved substitute assessment that can be administered on demand rather than waiting for a prescribed testing administration. Term Graduation testing provided additional opportunities for students to pass SOL tests in the summer following the senior year. Research questions that guided this part of the evaluation included the following:

1. How many students participated in Project Graduation, WorkKeys Writing Assessment, and Term Graduation testing?
2. What percentage of students participating in these initiatives received verified credits and graduated?
3. What student and school division factors kept students from participating in these initiatives?

Table 14 summarizes the number of students who participated in each of the Project Graduation initiatives for the divisions responding to this question. While ePat is not considered part of Project Graduation the school division survey did ask several questions about the use of this additional resource that allowed students to take practice assessments in English/Reading, English/Writing, Algebra I, and Geometry. According to the survey, the greatest participation was in ePAT. The actual total number of participating students is not known due to the large number of divisions that reported "don't know" or did not respond to the question. Several large divisions indicated "don't know" or did not respond. This suggests that these numbers substantially underestimate the total number of students participating. The relative participation can be estimated,

which indicates that over half of the students experienced help through ePAT, while a small percentage, only 6 percent, participated in the Summer Continuation Academy. Since the Summer Continuation Academy is available after the academic year this small percentage would be expected.

Table 14. Number of Students Participating in Project Graduation and ePAT (N=115 divisions)

Project Graduation Component	Total Number Participating	Number of Divisions Reporting Don't Know	Number of Divisions With No Response
Spring 2004 Academy (n=79 divisions)	1,649	15	22
Summer 2004 Continuation Academy (n=84 divisions)	604	12	21
Virginia Online Reading Tutorial (n=77 divisions)	2,069	23	20
ePat (n=61 divisions)	5,442	34	25

The impact of Project Graduation was determined by asking divisions to report the number of students receiving verified credits and graduating with a diploma as a result of their participation. This number was then divided by the number of students participating in one or more Project Graduation initiatives (which do not include ePat) to estimate the percentage of participating students who received verified credits and graduated. While the total number of participating students may be slightly inflated if students participated in more than one initiative, the overall percentages in Table 15 show that a majority of students received verified credits (58%), and a smaller percentage graduated (34%). It should be noted, however, that these figures do not include most of the larger divisions in the state. Consequently, these percentages should be considered

most typical for small and medium-sized divisions. Data collected by the Department of Education about participation in Project Graduation, with all of the school divisions reporting, indicated that of those students who participated in the online tutorial and Spring 2004 Academies, 89 percent earned verified credits and 62 percent graduated. In addition, these data showed that 95 percent of students who participated in the online tutorial passed the English/Reading SOL test; and of students that participated in the Spring 2004 Regional Academies 75 percent of passed English/Reading and 87 percent passed Algebra I SOL tests (Virginia Department of Education). This discrepancy between the percentages obtained from the division survey data and information provided by the Department of Education, along with missing data, suggest caution in drawing conclusions about the effectiveness of the Project Graduation initiatives. It should also be noted that many divisions have their own programs and activities that target students needing remediation. Participation in these efforts is not reflected in the numbers obtained for this report.

Table 15. Number and Percent of Students Participating in Project Graduation Receiving Verified Credits and Graduating With a Diploma[1]

Participation Result	Number	Percent[2]
Received Verified Credits (n=91 divisions)	2,516	58%
Graduated With Diploma (n=87 divisions)	1,483	34%

1. Includes Standard, Advanced, Modified standard Standard, and Special diplomas.
2. Denominator is total number of students participating in reporting divisions (4,322).

Two open-ended questions focused on factors that school division personnel thought would deter students from participating in Project Graduation initiatives. The first asked about factors associated with the student. The student factors mentioned are summarized in Table 16 by indicating the number of different divisions that indicated each factor. Each division could mention as many factors as appropriate. Twenty-eight divisions indicated that there were no factors that deterred students from participating in Project Graduation opportunities. Approximately one-third of the divisions indicated that

student motivation was a key to participation in the activities, though nearly as many indicated that employment prevented students from participating. Transportation was a factor for 18 divisions. Vacations and scheduling were also important factors. Only five divisions listed lack of parental support.

Table 16. Number of Divisions Indicating Student Factors That Deterred Students From Participating in Project Graduation

Factor	Number of Divisions
None	28
Lack of motivation/apathy/lack of interest/lack sense of urgency	38
Employment conflicts	35
Travel/Transportation	18
Insufficient time to complete	14
Enrolled in other remedial programs or summer courses	14
Scheduling conflicts/social/sports	10
Vacation conflicts	8
Difficulty enrolling in on-line course/computer accessibility	6
Lack of parental support/parental accessibility	5
Embarrassment/stigma/frustration	4
Lack of child care/family responsibilities	3
Emotional issues	1

Table 17 summarizes open-ended responses indicating school and/or division factors that may have prevented students from participating in Project Graduation. The most important finding with this question is the large number of divisions (67) that indicated “none” or did not indicate any factors. Scheduling and transportation were mentioned most; ten divisions indicated that lack of teacher or staff availability and/or lack of funds was a factor, though this represented less than 10 percent of the divisions.

Overall, there was a clear indication that division personnel thought student-related factors that were difficult to avoid, such as scheduling, transportation, and employment, along with a lack of student motivation, were most important as barriers to participating in Project Graduation activities. The impression is that the divisions seemed confident that the opportunities were provided.

Table 17. Number of Divisions Indicating School and Division Factors That Deterred Students From Participating in Project Graduation

Factor	Number of Divisions
None	67
Scheduling conflicts/time during day	16
Convenience for students/lack of transportation	13
Teacher/staff availability & funding	10
Insufficient time to plan and promote	5
Late notification of test results	5
Improved communication needed	3
Lack of computers	3
Conflicting programs	1
Lack of PR campaign to motivate student participation	1
Insufficient opportunities for students to enroll in on-line reading tutorial	1
Low teacher expectations for attending	1

Each division was asked to indicate how many students participated in the WorkKeys Writing Assessment and Term Graduation administration of the SOL test, and what percent of those students earned verified credits. Table 18 summarizes the results of these questions. The Term Graduation testing success rate was highest at 65 percent, with most divisions participating. The high number of students involved in Term Graduation testing (6,679), coupled with ePAT, shows that these two opportunities were most used for remediation and retesting.

Table 18. Number and Percent of Students Participating in WorkKeys Writing Assessment and Term Graduation SOL Test Administration Receiving Verified Credit

Program	Percent of Divisions Participating	Number of Students Participating	Number of Students Receiving Verified Credit	Percent of Participating Students Receiving Verified Credit
WorkKeys Writing Assessment (n=121 divisions)	48%	1,032	491	48%
Term Graduation (n=115 divisions)	88%	6,679	4,310	65%

Conclusions and Recommendations

In Virginia, 73.5 percent of 2000-01 ninth graders graduated with a high school diploma in 2004. A slightly higher percentage completed high school, and a slightly lower percentage received a regular diploma (standard or advanced). This means that approximately 26,000 students classified as ninth graders did not receive a diploma in four years. More than likely the vast majority of these students were either retained in grade, especially ninth grade, or dropped out of high school. Home-schooling, private schooling, and student migration are not significant factors in determining graduation rates. There were significant differences in graduation rates among the divisions by region and division size.

The 2004 graduation rate was lower than the 2003 rate by approximately 3 percent. While it can be concluded that there was a meaningful drop in the graduation rate for the class of 2004, compared to the class of 2003, the 2004 graduation rate was very similar to the rates in 2001 and 2002. Most of this drop was accounted for by Black and Hispanic students. More boys than girls failed to graduate. The lowest graduation rates were concentrated in southside and southeast Virginia, and in some urban divisions; the highest rates were in northern Virginia. These findings are consistent with other research that has found that the best predictors for graduation are socioeconomic status, race/ethnicity, and gender (Swanson, 2004).

While nearly 27 percent of 2000-01 students classified as ninth graders did not graduate in four years, only about 3 percent of 2003-04 twelfth graders that divisions expected to receive an advanced or standard diploma did not. Thus, once a student became a twelfth grader the probability of graduating with an advanced or standard diploma was very high. Of the twelfth grade students who did not graduate in 2004, 80 percent needed one or two verified credits to earn a standard diploma. Many more students needed standard units of credit. This suggests that success in courses is more of a deterrent to graduation than passing SOL tests. Course and SOL test difficulties were primarily in English, mathematics, and history/social science.

The class of 2004, particularly Black and Hispanic students, also showed a change in the type of diploma received, shifting somewhat from receiving an advanced or standard diploma to a modified standard or special diploma. This change means that of

those students who graduate, fewer are receiving an advanced or standard diploma. If this decline in the percentage of graduates receiving an advanced or standard diploma continues, it is cause for concern. These data suggest that because these changes are occurring in some divisions much more so than others, further study of factors explaining the changes should be targeted to specific locations with large concentrations of Black and Hispanic students.

Substantial efforts were made by school divisions to help students qualify to graduate. More than 10,000 students participated in Project Graduation initiatives, Term Graduation testing, and WorkKeys Writing Assessment. In addition, many divisions had specialized programs to help students graduate. Nearly 73 percent of students participating in Term Graduation testing and WorkKeys Writing Assessment received verified credit; a smaller percentage of students participating in Project Graduation were successful. The data suggest that the primary reasons for failure among students participating in Project Graduation were related to students, including conflicting schedules, transportation limits, and student motivation, though about half the divisions indicated that there were no barriers to student participation. Only infrequently were school or personnel resources mentioned as barriers. This finding is consistent with other research that has found a lack of student engagement, interest, and/or commitment are significant factors in deciding to drop out (Rumberger, 2004). This suggests that increasing the graduation rate may well depend most on what schools can do to enhance student engagement in school and motivation to graduate.

Grade retention is a significant factor in graduation that needs further study, especially at the ninth grade. Compared to other grade levels, the ninth grade has the largest retention rate. Further, divisions reported that nearly 57 percent of non-graduating twelfth graders continued in high school, suggesting that for many students, the numbers of years required to complete high school extend beyond the traditional four. Another reason to focus further study on grade 9 is the link between grade retention and dropping out of high school (Shepard & Smith, 1989). Grade retention patterns suggest that grade 9 is a key transition point for high school students, Black (2004) refers to ninth grade as “pivotal” for determining graduation.

In comparison to 2003 the graduation rate in Virginia declined in 2004, especially for Blacks and Hispanics, and a greater percentage of graduating students are now obtaining a modified standard or special diploma. The data suggest that implementation of the high-stakes testing requirements has not had dire consequences for graduation for most students. Remediation efforts targeting academic deficiencies and additional testing opportunities are successful in helping thousands of students graduate. While the effectiveness of some of these efforts can be improved, more emphasis may be needed on student engagement and motivation to graduate. Research on how to increase these student-centered characteristics could have a significant effect on the dropout rate.

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Appendix A

Virginia 2004 High School Graduates and Non-Graduates School Division Survey

Appendix B

Divisions Included in Each Size Range

Size Classification	Division Name	2000-01 Total Fall Membership
VERY SMALL (2000-01 fall membership > 1,721) n=25	Bath County Public Schools	821
	Bland County Public Schools	903
	Buena Vista City Public Schools	1118
	Charles City County Public Schools	941
	Colonial Beach Public Schools	580
	Covington City Public Schools	949
	Craig County Public Schools	711
	Cumberland County Public Schools	1309
	Department Of Correctional Education	1108
	Essex County Public Schools	1637
	Franklin City Public Schools	1423
	Galax City Public Schools	1320
	Highland County Public Schools	334
	King And Queen County Public Schools	945
	Lancaster County Public Schools	1513
	Lexington City Public Schools	475
	Mathews County Public Schools	1297
	Middlesex County Public Schools	1357
	Northumberland County Public Schools	1488
	Norton City Public Schools	709
	Radford City Public Schools	1582
	Rappahannock County Public Schools	1020
	Richmond County Public Schools	1256
	Surry County Public Schools	1268
	Sussex County Public Schools	1433
	West Point Public Schools	813

Size Classification	Division Name	2000-01 Total Fall Membership
SMALL (2000-01 fall membership 1,721-3,398) n=37	Alleghany County Public Schools	2904
	Amelia County Public Schools	1788
	Appomattox County Public Schools	2397
	Bristol City Public Schools	2408
	Brunswick County Public Schools	2426
	Buckingham County Public Schools	2260
	Charlotte County Public Schools	2217
	Clarke County Public Schools	1947
	Colonial Heights City Public Schools	2773
	Dickenson County Public Schools	2712
	Falls Church City Public Schools	1721
	Floyd County Public Schools	1957
	Fluvanna County Public Schools	3048
	Fredericksburg City Public Schools	2143
	Giles County Public Schools	2538
	Goochland County Public Schools	1984
	Grayson County Public Schools	2263
	Greene County Public Schools	2607
	Greensville County Public Schools	2766
	King George County Public Schools	2939
	King William County Public Schools	1785
	Lunenburg County Public Schools	1836
	Madison County Public Schools	1849
	Manassas Park City Public Schools	2013
	Martinsville City Public Schools	2711
	Nelson County Public Schools	2058
	New Kent County Public Schools	2342
	Northampton County Public Schools	2198
	Nottoway County Public Schools	2499
	Patrick County Public Schools	2640
	Poquoson City Public Schools	2474
	Prince Edward County Public Schools	2623
	Rockbridge County Public Schools	3053
	Southampton County Public Schools	2862
	Staunton City Public Schools	2786
	Waynesboro City Public Schools	3030
	Westmoreland County Public Schools	2050

Size Classification	Division Name	2000-01 Total Fall Membership
MID-SIZE (2000-01 fall membership 3,399 – 13,870) n=54	Accomack County Public Schools	5340
	Albemarle County Public Schools	12237
	Alexandria City Public Schools	11167
	Amherst County Public Schools	4630
	Augusta County Public Schools	10746
	Bedford County Public Schools	10697
	Botetourt County Public Schools	4583
	Buchanan County Public Schools	4063
	Campbell County Public Schools	8654
	Caroline County Public Schools	3888
	Carroll County Public Schools	3990
	Charlottesville City Public Schools	4458
	Culpeper County Public Schools	5627
	Danville City Public Schools	7659
	Dinwiddie County Public Schools	4318
	Fauquier County Public Schools	9613
	Franklin County Public Schools	7140
	Frederick County Public Schools	10634
	Gloucester County Public Schools	6451
	Halifax County Public Schools	6030
	Harrisonburg City Public Schools	3743
	Henry County Public Schools	8807
	Hopewell City Public Schools	3967
	Isle Of Wight County Public Schools	4973
	Lee County Public Schools	3815
	Louisa County Public Schools	4219
	Lynchburg City Public Schools	9212
	Manassas City Public Schools	6411
	Mecklenburg County Public Schools	4997
	Montgomery County Public Schools	9114
	Orange County Public Schools	3955
	Page County Public Schools	3537
	Petersburg City Public Schools	5984
	Pittsylvania County Public Schools	9241
	Powhatan County Public Schools	3573
	Prince George County Public Schools	5855
	Pulaski County Public Schools	5015
	Roanoke City Public Schools	13800
	Rockingham County Public Schools	10703

Size Classification	Division Name	2000-01 Total Fall Membership
MID-SIZE (2000-01 fall membership 3,399 – 13,870) n=54	Russell County Public Schools	4263
	Salem City Public Schools	3955
	Scott County Public Schools	3671
	Shenandoah County Public Schools	5447
	Smyth County Public Schools	5189
	Suffolk City Public Schools	11983
	Tazewell County Public Schools	7116
	Warren County Public Schools	4935
	Washington County Public Schools	7360
	Williamsburg-James City Public Schools	8191
	Winchester City Public Schools	3399
	Wise County Public Schools	6938
	Wythe County Public Schools	4318
	York County Public Schools	11756
LARGE (2000-01 fall membership 13,871-41655) n=12	Arlington County Public Schools	18870
	Chesapeake City Public Schools	37645
	Hampton City Public Schools	23290
	Hanover County Public Schools	16611
	Henrico County Public Schools	41655
	Loudoun County Public Schools	31804
	Newport News City Public Schools	33008
	Norfolk City Public Schools	37349
	Portsmouth City Public Schools	16473
	Richmond City Public Schools	27237
	Roanoke County Public Schools	13869
	Spotsylvania County Public Schools	18876
	Stafford County Public Schools	21124
VERY LARGE (2000-01 Fall membership > 41,656) n=4	Chesterfield County Public Schools	51212
	Fairfax County Public Schools	156412
	Prince William County Public Schools	54646
	Virginia Beach City Public Schools	76586

Appendix C

Verbatim Responses to Question 20 of the Virginia 2004 High School Graduates and Non-Graduates School Division Survey

<u>Question 20</u>: In your opinion, what student-level factors deterred 11th and 12th graders from participating in any of the Project Graduation components in 2003-2004?

- After school hours and job/transportation conflicts.
- Summer jobs; vacations; apathy; offerings not what students - writing; students are more comfortable on site.
- Local programs targeted at EDC tests were more convenient for students to attend.
- After-school jobs. Embarrassment.
- Some children were enrolled in summer school repeating classes, others were enrolled in remedial programs. Travel was also an issue. Our school offered SOL remedial programs that were offered through Project Graduation (ex. Writing, Reading, Algebra 1).
- Scheduling problems (for SOL remediation). Lack of transportation for after-school remediation. Some stigma may have been felt by some students.
- Attendance.
- We offer tutorials and remediation so our students do not have to depend on Project Graduation.
- Difficulty enrolling in Internet VA online tutorial. Students would love to have independent access to this resource.
- Transportation to after-school or before-school sessions.
- Lack of motivation on the part of certain students.
- Transportation. Child care for students with infants.
- Students are tutored by their teachers in SOL classes during, before, and after school. I believe they feel this is sufficient.
- Don't know.
- Students had opportunities to participate in remedial programs during and after school in the 2003-04 school year. Because juniors who had not passed could take advantage of these programs during the 2004-05 school year, they were less likely to attend the summer program if they had passed the course but only needed the verified credit.
- One school did not access to all components of program. The juniors preferred to try again in senior year. Lack of information, student interest, and parental involvement.
- All students who had access participated.
- Conflict with work and after-school schedules. Motivation to attend.
- There were few seniors who needed verified credits (2).
- Summer work.
- Summer school, planned family vacations, employment.
- Motivation/time to complete the program.

- _____ County Public Schools offers an extensive summer SOL Review Session for all high school students. This year 460 students participated. Classes were offered in all core areas. Seniors and juniors who did not participate cited reasons such as job requirements and previous vacation plans for not attending.
- N/A.
- Personal circumstances - e.g. must work, take care of ill parent, etc., though we didn't have much resistance - most were "on board".
- Lack of motivation.
- Summer - lack of interest, summer jobs, transportation, pre-planned vacations. Spring - N/A.
- We were able to have all necessary students participate in Project Graduation.
- Lack of time during school day. Some thought "it can't happen to me".
- Not enough pressure from family.
- After-school jobs. Transportation.
- Transportation. Vacation.
- After-school transportation. Lack of interest on students' part. After-school jobs.
- Late notice of availability and choice of alternative remediation.
- Lack of documentation that students would not graduate. Scores received too late, especially writing. Scheduling for WorkKeys had a 24 hour turn around.
- School-level interventions and supports were provided and addressed the needs of targeted students.
- Lack of incentives to remain after school.
- All of our seniors had passed English: R&L SOL Test. ePAT was used as training component of online testing.
- Time during the day when not in classes and students not taking the time at home in the evenings.
- Students' laziness and lack of motivation and their lack of parental support.
- Not taking seriously the importance to participate. Procrastination. Students' jobs. Frustration.
- Employment. Vacations. Lack of transportation. Lack of advanced notice. Inconvenient timing.
- Job conflicts during the summer. Unwillingness to give up the summer vacation. Parent vacation.
- Part-time jobs, summer employment, lack of interest.
- Did not want to commit the time during the summer.
- Not needed.
- Lack of information, information not provided to staff in time for effective implementation.
- The students participated in a remediation course for EOC Writing and EOC

RLR. Students were also given the opportunity to participate in Spring '04 and Summer '04 remediation courses for non-writing SOL's.

- None.
- After-school employment. Length of sessions. Location of sessions. Not interested in attending.
- Lack of motivation to make extra effort; unwilling to spend extra hours. Uncertainty of new policy - really didn't pay attention to their status until 2nd semester of grade 12.
- The students were achieving their necessary credits through regular school access such as coursework.
- Social activities. Work. Lack of interest.
- Lack of student interest.
- Travel to academics.
- Lack of motivation. Jobs. Sports.
- After-school hours, students wanted to go home after having a long day of school.
- Some students who could have benefited from the summer program had to attend summer school; some students preferred to work during the summer.
- Conflicts with summer school schedule, work, and vacations (during the summer).
- Don't know.
- Late notification regarding program, bureaucratic requirements students worked / lack of motivation / apathy distance from home to school and time of day influenced time constraint for students.
- Time during the school day.
- I am unaware of any student-level factors that deterred 11th and 12th graders from participating in Project Graduation components in 2003-04.
- Motivation, time, availability of technology, lack of awareness.
- Other remediation tactics worked in most cases. We will be using the online tutorial and ePAT with more students this year.
- Scheduling conflicts, lack of motivation. We have a large number of LEP students, and language is a barrier to pass the writing test.
- Time. Could not address specific questions by individual student.
- Students who did not participate in Project Graduation because it was not during the school day.
- Students do not have the time during the school day to utilize these components. After school and in the summer, most are doing school activities or working. There is a lack of motivation and interest for this caliber student.
- Employment. Lack of motivation. Poor attitude. Lack of urgency.
- It was not needed at this point in time.
- Two students participated in the Online Tutorial. One student did not continue

because he received a passing grade from previous testing. Both students reported that they found the program beneficial. Nothing deterred the students.

- Nothing.
- Many students work in the afternoons and summers and choose not to participate.
- Lack of motivation. Daycare needs after school. Commitment to jobs.
- It was offered to all of the 12th grade students who were eligible. All of the 11th grade students used the ePAT testing practice.
- They are lazy.
- Lack of interest - 4 did not follow through but 3 earned verified credits anyway (the 4th one who didn't follow through is a senior this year). Lack of time. In some cases limited computer access. One was too embarrassed to let anyone know she needed help.
- Summer vacations, part-time employment, other family commitments.
- Willingness to attend sessions outside of school time and at lunch. Door to door transportation unavailable.
- Students preferred to participate in the local school division remediation programs for SOL verified credits.
- Transportation.
- Due to work and other obligations some students were unable to attend sessions during the summer. Computer technology was not accessible to some students in their homes.
- Indifference. Jobs.
- The one component we used was part of the English 11 class content, so all students participated.
- Some students did not have time as they were involved in numerous other academic activities related to graduation.
- Lack of information. Local remediation opportunities. Accessibility and convenience for parents. Programs are not user-friendly and were not advertised early enough for senior class of 2004. Lack of interest for assistance outside the school day. No home computer. Lack of after-school time.
- None.
- All of our students successfully met the graduation requirements with the support provided by the school.
- Full time summer employment, part-time employment during the school year.
- We offered our own remedial program during the regular school year and the summer.
- Their willingness to sign up, attend sessions, take tests.
- Jobs, other responsibilities, emotional issues, lack of parental push.
- Lack of time at school. Lack of computers at home.
- Student jobs, transportation, indifference.

- Unsure.
- Personal motivation, relevance of the program.
- We did not have a problem with participation.
- Conflicts with after school schedules - students had part-time jobs.
- Access to adequately performing computers, lack of transportation, personal motivation, significant investment in personal time, job conflict, summer school attendance.
- None. Some students opted to place work above school.
- LEA provided additional remedial options.
- Part-time employment.
- Lack of student motivation. Lack of student interest. Student involvement in other activities.
- Student attendance.
- Time - Many of these students work and are not able to attend sessions in summer or after school.
- Time offered. Time on task.
- We had 100% pass rates and no need for the academics or tutorial.
- Many of our students need to work.
- Transportation. Time.
- N/A.
- Students lacked academic credits.

Appendix D

Verbatim Responses to Survey Question 21 of the Virginia 2004 High School Graduates and Non-Graduates School Division Survey

<u>Question 21</u>: In your opinion, what school-level and/or division-level factors deterred 11th and 12th graders from participating in any of the Project Graduation components in 2003-2004?

- Local programs targeted at EDC tests were more convenient for students to attend.
- We need better communication.
- Master schedule conflicts. Teacher availability. Distance from academy locations.
- None.
- There were no deterrents.
- None.
- Lack of time with teachers. Students wanted to participate on their own time.
- None - students were given opportunities to participate, but chose not to participate.
- Transportation. Up front planning time for funding use.
- Our school offers tutoring, before and after school hours for students who may have difficulty passing the SOL in one or more areas.
- Don't know.
- Conflicting schedules with extra-curricular activities. Lack of timely information and access to all components of the program.
- Unaware of any factors, every effort was made at the school and division level to encourage students to participate.
- Teachers chose not to use the English ePAT.
- Lack of PR campaign to solicit student participation and encourage attendance.
- None.
- Time.
- All schools provided remediation during the day or after school throughout the year. Therefore students did not see a need to participate in centrally coordinated summer remediation.
- N/A.
- None - had sufficient planning, incentives, money, faculty. Went very well.
- There was a limit on the number of students that could enroll in the online reading tutorial.
- Writing tests results not received in time. Change of Academy schedule affected staff availability. Lack of student interest.
- There was such a short turn around time, it was difficult to have a cohesive plan.
- Transportation.
- Currently, the majority of Buena Vista students receive some form of diploma.
- Transportation. Summer activities.

- Time offered. Coaches and after-school sports.
- Late notification of alternative opportunities for in-house remediation.
- Few participated in summer school.
- Given the small number of identified students at one high school and significant support services it is believed that students were not formally deterred from participation. However, the division will seek to employ additional ways to make students more aware of Project Graduation activities and resources.
- Lack of sufficient funding (to implement better guidance strategies).
- No teacher with free time to pull students into sessions to work on the online reading tutorial.
- The division used ePat assessments on local benchmark tests, so 12th graders had access that way and 11th graders when they occurred on benchmarks, but students did not have direct access any time they wanted it.
- None. Many, many efforts were made to get students to attend and participate in the Project Graduation Components.
- Scheduling. Cost of staffing.
- None.
- None.
- Not needed.
- None.
- Students were exposed to the tutorial and ePAT. The school division also designed a remediation course for all term graduates who needed to pass the EOC Writing and/or EOC RLR tests. The school division also used state remediation funds for Spring '04 and Summer '04 remediation.
- None.
- Sessions are not mandatory. Time-span for sessions is too broad. School is on block system and students think they have another chance without attending the sessions.
- I honestly feel we made tremendous efforts to advertise and recruit.
- Failure to compile data on Project Graduation prevents us from making observations or drawing conclusions at the division level. Information about Project Graduation was managed at the school level. We are attempting to compile data but cannot report it at this time.
- The students were achieving their necessary credits through regular school access such as coursework.
- None. The division made every attempt to accommodate students.
- Low need.
- Teachers' expectations for students to attend.
- Staff resources to tutor/facilitate are limited.
- The tutorial programs were being held after school or before school.

- Traveling to the schools for remediation.
- None to my knowledge.
- None. We offered transportation, snacks, flexible scheduling, and gas vouchers.
- Don’t know.
- Significant local effort established and extended prior to notification about project. Unrealistic deadline for identifying potential candidates. Limited time to promote.
- Time during school day.
- I am unaware of any school-level or division-level factors that deterred 11th and 12th graders from participating in Project Graduation components in 2003-04.
- Time during the school day. Many teachers took groups to the lab for ePat. Counselors assigned senior students to the review lab for VA online reading tutorial. Availability of computers, time.
- Lack of time to train all teachers; limited funding; need more computer training for teachers on ePAT.
- None - students had access to 4 computer labs after school as well as during class time.
- More participation if it was held during the school day.
- In our small high school, by grade 11 or 12, most students are on track with their certified credits. Very few need this intervention at that late date for our student population.
- Not necessary at this point.
- NCHS could accommodate more students if we had a computer lab and teacher available throughout the day for remediation.
- Nothing.
- Unknown.
- It was not available to 11th graders at this school; however, all of them are registered for this program for 2004-2005.
- None - We offered it after school with a bus to take them home.
- Late notification and start time of the program. We already had student schedules set and it was difficult to change their schedules by the time we found out about the program.
- Distance from home.
- Computer access problems - not enough computers available when tutorial help available. Door to door transportation.
- Ample remedial/tutorial opportunities were/are provided at both high schools and at the technical center. Transportation out of the county to Project Graduation Academies takes considerable time.
- No available after-school transportation.
- All SOL assessment data reports had not been sent by the start of the summer

session.

- None.
- No student was deterred.
- None.
- Lack of information. Accuracy of information. Local tutorials and remediation were trusted, convenient, and accessible. Project Graduation programs were made accessible too late in the school year.
- None.
- Students in danger of failing had the support they needed at the school level.
- None.
- Distance to travel.
- Cannot confirm that all students were aware of Project Graduation but understand that they knew.
- Anything outside school hours is problematic.
- None aware of.
- Times of scheduled activities, lack of transportation.
- None that we know of.
- None.
- Computer problems: time would run out.
- Spring program had too many sessions and the length of each session (3 hours) didn't attract all students. Summer program had shorter sessions three days a week. Testing at the end of each week was a plus.
- Lack of transportation, over-committed staff, short notice of availability of programs.
- Our division did not participate in the academies.
- None.
- Very few students needed it; they received intense remedial instruction.
- No factors reported from the schools.
- Scheduling. Staffing.
- Schedule - time offered.
- Did not need.
- Offered in summer. Curriculum issues such as end-of-course tests in non-SOL subjects. Students would not miss those classes to attend the Project Graduation classes.
- Not promoted - not needed. We did not have a verified credit problem.
- None qualified.

Appendix E

Verbatim Responses to Survey Question 25 of the Virginia 2004 High School Graduates and Non-Graduates School Division Survey

<u>Question 25</u>: In your opinion, what factors contribute to division-by-division differences in the ration of 2004 graduates to 2000 9th grade enrollment?

- Enrolling in the GED program and retention.
- 33% annual mobility. ECS (LEP) students remain in 10th grade until they earn 10 credits. Many students spend 5 years in high school, especially those enrolled in LEP and IDEA programs. Dropout factors.
- Increased graduation requirements. Decline in district enrollment.
- Transfers, retentions.
- Socio-economic make-up of population. Transient families - transfers to other school systems. Economic conditions for area.
- Many LEP students remain more than 4 years. These students are a larger factor in school divisions like Arlington than in many others. Our policy is to place older LEP in grade 9 regardless of academic preparation. Some divisions may have more options for special education students. LEP and special education students may remain to age 22.
- Drop-out report outlines reasons for dropping out school - DOE has annual reports - data available there.
- We had very little change in our drop-out rate due to SOL Testing. SOL requirements did keep a small number of seniors from graduating. Most seniors not graduating also lacked standard units of credit.
- Transfers in and out of the division.
- Early graduation; GED option; mobility of families.
- Families have moved out of the area due to job losses. A number of students failed classes required to move to the next grade level.
- Transfers, migrant populations, dropouts, and ISAEP graduates.
- Don't know.
- Many families have left _____ County because of the decline in the employment market.
- Transfer, retention, early graduation, ISAEP. Compulsory attendance release.
- Some students find GED better meets their needs. Students who want to pursue career and technical training in high school don't see the relevance of some academic graduation requirements.
- Transfers. Drop-outs.
- Transiency.
- Dropouts; shifting between grades due to credits/early graduation; moving out of system; enrollment in alternative program/GED; did not earn appropriate credits in June but graduated during summer school (August 2004).Students moving out of the area and students graduating early.
- Students transferring out of division, some GED - ISAEP program students, some

graduate early, extreme small percentage drop out.

- A number of these students transferred out of our school division. A number of these students changed to an alternative program to prepare for the GED.
- Loss of employment by major industry.
- A number of them moved.
- Transfers. Drop-outs.
- Job opportunities elsewhere.
- No opinion.
- Mobility of student population.
- Factors would include student mobility rate, class sizes, support courses and services, to cite a few.
- I consider it too early to consider the high stakes testing a factor. If this is indeed a factor, then a "connecting" factor is curriculum access or teacher preparedness in some programs (e.g. special education).
- Students move from the division, drop-out as they began high school, 93 overaged 9th graders.
- Students dropping out to pursue GED or dropping out to work. Large numbers of students (families) moving into county for a short period of time then moving to other locations. Repeat 9th graders (2000) who graduated in a different year.
- High grade 9 retention rate in 2000. Failure to earn course credit.
- Mobility of families.
- Graduation rates do not count modified standard and special diplomas in the graduation rate formula.
- I don’t really understand this question. What does division-by-division mean? And where is the ratio?
- Student relocation during four year period; low reading levels upon entering 9th grade; no credits for students completing high school through alternative routes such as GED and modified standard diplomas.
- Increase development housing, private/homeschool returnees.
- Three general factors contribute to differences in the ratio: transfer to other school divisions, drop-outs, and students chose to earn a GED.
- Education of parents on accountability of educators.
- Move or transfer to a private school. GED option - Career Center. Special Education options. Home-school option.
- Academics, but it is not possible to track directly to verified credits since students left school at all grade levels.
- Retentions. Dropouts.
- Declining population due to economic depression. Transient Hispanic population.
- Students transferring to other schools due to family relocation. A few student

retentions prior to senior year.

- Students enrolling in IASEP. Transient students.
- Mobile community. Reporting procedures.
- Drop-out rate, verified credit requirements, qualified teachers.
- Students transfer in and out multiple times in high school years. A few may pursue GED or other vocational trade/GED preparatory courses.
- Don't know.
- Array of available services, level of support. Fast demographic growth of county.
- Level of education of parent and parental involvement.
- More students fail classes in 9th grade than any other grade and are retained as a result; but by the time they have completed their 10th grade year, they have earned enough credits to skip 11th grade and go to 12th grade. That is why 11th grade is usually the smallest class in school, and the 9th grade is the largest. The best way to estimate how many students in 9th grade eventually got to 12th grade in a school with a relatively stable student population is to divide school enrollment by 4 to get the average class size and then compare that number to the size of the senior class.
- Socio-economic factors.
- Not all our 9th graders are first time ninth graders. We have had some students leave for home-schooling and GED programs. Some of the difference is due to drop-outs.
- We live in a very transient area; therefore our numbers change significantly from year to year.
- Family moves in and out of the community.
- Lack of employment opportunities. Low commitment to education.
- Students have moved out of the division, and many have chosen to pursue the GED.
- No opinion.
- Transfers, retentions, early graduation, and drop-outs affect the numbers.
- Retentions (312 are currently 12th grade students). Students moving out of area. Students completing GED. Drop-outs.
- Dropouts. SOL requirements. More students opted for GED. Students seeking alternative programs.
- The division has a declining enrollment.
- We are dependent on the mining industry. When it shifts our student population shifts. Also we have a large number of housing projects and families move in and out often. Even if we had even if we had 50 9th graders and 50 seniors the year they graduate at least one third would be different students.
- Some students moved to other school divisions, earned a GED, or dropped out, or moved out of state. Some were retained in grade 11 because they did not earn

enough standard credits to be considered a 12th grader.

- Numbers of student transfers from out of county. Our dropout rate is under 1%.
- Received GED, were retained in earlier grades, transferred, or dropped out.
- Teacher training/qualifications.
- Many of our ninth graders are retained in grade 9, then catch up with their class and graduated in 2003; some dropped out due to poor grades or entered GED program; some transferred to other divisions.
- Drop-out rate. Transfers (military). Retention.
- Transient population; demographic changes; non-native language issues; increased graduation requirements.
- Home-school, early graduation, transfer, drop-out, GED.
- Enrollment from, and departure to, private school is a common occurrence in rural divisions.
- Retention, relocation, transfers, attendance patterns.
- Some did not take their education seriously, dropped out, and entered the work world. Some transferred to other divisions when their families moved (relocated).
- Number of students retained (not moving one grade level each year); number of drop-outs; students moving into GED program (which "freezes" them at a grade level according to credits earned to-date).
- Is the questions "Why do different school divisions have different drop-out rates?" That answer is concerted effort of all personnel. Is the question "Why are there fewer 12th graders than 9th graders?" That questions would have to be answered student by students. Students graduate early, late, more, etc.
- Some students transferred. Some students did not complete the necessary credits to move to the higher grade.
- Community SES; job market; housing availability.
- Counseling focus and support. Family support for education. Circumstances and choices students are caught up in.
- Student transfers, early graduates, career opportunities in CTE occupations, SOL end-of-course test failure/frustration.
- Loss of jobs due to factory closings.
- Student population growth or decline parent transciency.
- Student growth.
- We have a lot of school transition due to the Military. We have a high turnover of transfer students within the division and region. Some students drop out and pursue the GED program.
- Retention, transfers, drop-outs.
- In our division, we lose approximately 100-150 students per school year. People are moving out of our county due to lack of jobs.

- Alternative programs - GED - ISAEP - highly transient area.
- Students moving, increase in numbers retained in school due to improved truancy monitoring program.
- Economy. Transfers.
- Transferring, early graduation or term graduates enrolled in the ISAEP or GED programs, turned 18 or was emancipated by the court.
- Increased requirement of SOL tests (from high school counselor).
- Drop-outs, GEDs, and transient students.
- YCSD has a transient population (large military population). Some students will graduate in 2005. Some 2000 9th grade students graduated in 2003.